

Storming the Gates of the Temple of Science:
Religion and Science in Three New Religious Movements

Benjamin E. Zeller

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Approved by:

Prof. Yaakov Ariel

Prof. Laurie Maffly-Kipp

Prof. Thomas A. Tweed

Prof. Seymour Mauskopf

Prof. Grant Wacker

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ABSTRACT

Benjamin E. Zeller: Storming the Gates of the Temple of Science: Religion and Science
in Three New Religious Movements
(Under the direction of Prof. Yaakov Ariel)

This dissertation considers how three new religious movements—the Hare Krishnas, Unification Church, and Heaven’s Gate—treated the concept of science and the relation of science to religion and the wider society. Each of the three religions offered a distinct position on the nature of science and how religion and science ought to interact. All of the three new religions understood their views of science as crucial to their wider theological views and social stances. And, in each of these new religious movements, the nature and meaning of science served a central role in the group’s self-understanding and conceptualization. Because the roles and boundaries of science so concerned each of the groups, their founders, leaders, and ordinary members offered both implicit and explicit re-envisionings of science. These views developed out of each group’s historical circumstances and theological positions, but also evolved in concert with concurrent social developments and cultural influences.

Such varying factors resulted in three different perspectives on science. The Unification Church aimed to *guide* science and the American scientific establishment. It positioned science as a sphere separate from religion, yet at the same time attempted to direct science’s ethical boundaries, methods, and even research goals. The Hare Krishnas sought to *replace* Western science with an alternative scientific-religious system rooted

in their own Hindu religious tradition. The science of ancient Indian religious texts, they insisted, offered a more accurate and socially healthy paradigm than that of the contemporary American scientific establishment. Heaven's Gate attempted to *absorb* or incorporate science and scientific elements into their religious system. It looked to methodological materialism and naturalism as the ideal epistemology, and declared itself the truest form of science.

Taken together, the manner in which the three new religious movements responded to the power, prestige, and place of science in America demonstrates the multiple ways that religious groups can incorporate creative tension with science into their broader intellectual positions. The three groups emerged from different cultural and historical circumstances, yet they each insisted that religion could respond to science with neither warfare nor surrender.

To my parents, who have always represented the best of science and religion

“Over the entrance to the gates of the temple of science are written the
words: Ye must have faith.”

-- Max Planck, *Where is Science Going?*

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This dissertation did not begin with an epiphany, but grew from years of reading primary sources produced by new religious movements. Slowly I recognized that my highlighting and marginalia proliferated whenever sources mentioned science. Thus I began an exploration of how the leaders and members of new religions wrote and spoke about science. My past experience with science—in college I originally majored in computer science—no doubt contributed to my interest in the subject. Yet it was in conversations with my mentors and colleagues that this dissertation really took form, and to them that I owe a debt of gratitude. My advisor Yaakov Ariel has read the entire manuscript and offered helpful criticisms and suggestions, and my work is much stronger because of his help. I am extremely fortunate to have had the chance to work with him. Thomas A. Tweed, Grant Wacker, Laurie Maffly-Kipp, and Seymour Mauskopf have each read the entire manuscript and offered valuable critiques. They have all been extremely supportive in the writing process. Emily Mace has also carefully read and evaluated this dissertation, and has helped me to better articulate my thesis. I would have liked the chance to share this dissertation with the late William Hutchison, under whom I first explored the historiography and religion and science, and even eight years later I recall his suggestion that my interests in new religions and in science needn't remain separate.

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INTRODUCTION

The year 1972 was a good one for the American scientific community. That year several groups of biologists across the nation created the first recombinant DNA molecules, artificial genetic chains that opened the door for research into human genetics and new medical treatments. In Batavia, Illinois, physicists activated the main accelerator ring of the Fermi National Accelerator Laboratory, inaugurating what would become one of the world's most productive subatomic particle research centers. At Bell Laboratories in New Jersey, computer scientists invented a new programming language called "C" that allowed them to write more complex programs, reshaping the field of computer science and computer technology more broadly. Such scientific progress contrasted with the harsh realities of politics and international affairs: the Watergate break-ins, the Munich massacre of eleven Israeli athletes, and the Bloody Sunday riots in Northern Ireland all occurred that year as well.¹

The year 1972 also witnessed developments among new religions in America. The International Society for Krishna Consciousness, better known as the Hare Krishna movement, released under its publishing wing a new American edition of its founder's seminal text on religion and science. That short book, *Easy Journeys to Other Planets*, outlined their leader's vision of how a science rooted in Indian religiosity could supplant or replace Western materialistic science, not to mention religion. That spring, two spiritual seekers named Marshall Herff Applewhite and Bonnie Lu Nettles met in a Houston hospital, bonded over their shared interest in astrology, and founded the

movement eventually named Heaven's Gate. The two would seek to incorporate or absorb science and scientific thinking into the religion that they founded. In the autumn, the Holy Spirit Association for the Unification of World Christianity, more widely called the Unification Church, sponsored the first of what would become a series of symposia called the International Conferences on the Unity of the Sciences. The conferences brought together scientists, ethicists, philosophers, and scholars of religion, and demonstrated how the Unification Church and its leaders hoped that religion could shepherd or guide scientific research and development.

The Temple of Science

Here I consider how three new religious movements—the Hare Krishnas, Unification Church, and Heaven's Gate—treated the idea of science and the relation of science to religion and wider society. Each of the three religions offered a distinct position on the nature of science and how religion and science ought to interact. Yet all of the three new religions understood their views of science as crucial to their wider theological views and social stances. For each of these new religious movements, the nature and meaning of science served a central role in the group's self-understanding and conceptualization. Because the roles and boundaries of science so concerned each of the groups, their founders, leaders, and ordinary members offered both implicit and explicit re-envisionings of science. These views developed out of each group's historical circumstances and theological positions, but also evolved in concert with concurrent social developments and cultural influences. Such varying factors resulted in three different perspectives on science. The Unification Church aimed to *guide* science and the

American scientific establishment. It positioned science as a sphere separate from religion, yet at the same time attempted to direct science's ethical boundaries, methods, and even research goals. The Hare Krishnas sought to *replace* Western science with an alternative scientific-religious system rooted in their own Hindu religious tradition. The science of ancient Indian religious texts, they insisted, offered a more accurate and socially healthy paradigm than that of the contemporary American scientific establishment. Heaven's Gate attempted to *absorb* or incorporate science and scientific elements into their religious system. It looked to methodological materialism and naturalism as the ideal epistemology, and declared itself the truest form of science. Each of these approaches challenged the status quos of American science and religion, as well as the American scientific establishment, what some have called the "temple of science" in America.

The concept of the "Temple of Science" arose in Europe among scientists who treated their scientific vocation with an almost religious dedication to the ideal of pure science as a noble pursuit of truth and knowledge. Albert Einstein (1879-1955) famously used the phrase in a 1918 address, and Max Planck (1858-1947) repeated it in his 1933 book, *Where is Science Going?* Both intended the term as an approving endorsement of scientific research.² The concept later took root in North America. German physicist and Canadian émigré Gerhard Herzberg (1904-1999) transplanted the term, dubbing his Saskatchewan research center a "Temple of Science." The laboratory still uses the name today.³ Though it certainly never achieved popular parlance, the term is useful because it implies the ethos, institutions, and cultural power of science and the scientific establishment in America. As a symbol, the temple of science represented an ideal that

the new religions rallied against, though the leaders of the movements never used the term themselves.

The temple of science in the United States grew exponentially in the 1940s-1950s, preceding the emergence of the three new religions considered here. A number of historical factors led to this burgeoning of science. In the immediate postwar years, increased numbers of colleges and universities expanded their dedication to scientific research and development, churning out both new scientists as well as new technologies.⁴ In addition the postwar wake of the New Deal had led the federal government to rely upon social scientists to an increasing degree, with a resultant increase in their numbers and prestige. Yet perhaps the greatest impetus for the rise of the scientific establishment in the latter half of the twentieth century derived from the explosion of, fascination with, and reliance on, science and technology following the Second World War. Paul Boyer has documented the immediate boost of interest in science and respect for scientists after the war, tendencies that coexisted with anxieties about the nuclear bomb and the possibilities of atomic annihilation.⁵

Atomic physicist Heinz Haber gave voice to the perspective emphasizing the almost utopian possibilities of science in his 1956 book, *Our Friend the Atom*. Haber regaled the reader with promises of endless cheap atomic energy, supersonic atomic-powered planes, and stout nuclear-powered naval ships to defend American borders. In the broadest sense, science offered universal beneficence, he insisted. “The magic power of atomic energy will soon begin to work for mankind throughout the world. It will grant the gifts of modern technology to even the remotest of areas. It will give more food, better health—the many benefits of science—to everyone.”⁶ Haber represented a wider

assumption that science and technology held solutions to the nation's problems, an approach so popular that his book received corporate sponsorship. The Walt Disney corporation subsidized its publication as well as produced a filmstrip and amusement park exhibit of the same name. Even when the allure with nuclear science faded, Americans' dependence on technology and continuing scientific development increased. The Cold War itself led to a reliance on science and technology and encouraged increased spending on defense research, much of which occurred in the new centers of government-sponsored science, which became American sanctuaries of the temple of science.⁷ Yet not everyone shared Heinz Haber and Walt Disney's enthusiasm.

Some commentators in America offered a less affirmative view of the temple of science. The 1960s witnessed an increase in the criticism of the growing place and power of science in the United States, alongside criticisms of America's other establishments, such as educational institutions, corporations, the nuclear family, and the churches.⁸ Such opponents of mainstream culture, eventually called the "counterculture," linked the critique of modern science and technology to a variety of concerns. One popular criticism of science during this period complained that science failed to live up to the expectations of its postwar proponents, that rather than usher in a brave new world of utopian life, science had fostered a Huxleyian *Brave New World* of dystopic social control and devaluation of human individuality. Others made the opposite accusation, that science had devastated community and the social fabric of life. Those with more Marxist leanings charged science and technology with contributing to an unjust capitalist culture, while still others focused on environmental damage or risks to human health. Popular culture often combined these sentiments. Kurt Vonnegut's *Cat's Cradle* (1963)

described worldwide environmental devastation and the destruction of the human race at the hands of an irresponsible scientific community, as well as that community's tendency to enable dictatorial social control.⁹ Ernst Schumacher's *Small is Beautiful*, published a decade later in 1973, accused science of "mutilating" humanity's self-worth and fostering a harmful economical system.¹⁰ Among the countercultural readers of Vonnegut and Schumacher, the new religious movements played an important role, serving as theological nuclei that presented new options to the religious mainstream. Each offered alternative religious visions of the ideal individual and society, and several of them—the Unification Church, the Hare Krishnas, and Heaven's Gate—offered alternative imaginings of science as central components of those visions.

Science and the Study of New Religious Movements

Scholars categorize each of the three groups that I consider in this dissertation as new religious movements (NRMs), a term that researchers invented as a replacement for the older term 'cult,' which had taken on such a pejorative connotation that many scholars felt it had lost its descriptive value. Though historians later applied the concept of NRM to groups that appeared in earlier eras, for example Christian Science or Mormonism, scholars initially employed the term to describe the alternative religions of the American counterculture, such as Transcendental Meditation, Happy-Healthy-Holy, the Children of God, and some of the American Zen groups. A number of scholars focused on two of the largest of the new religions, the Holy Spirit Association for the Unification of World Christianity, better known as the Unification Church, and the International Society for Krishna Consciousness, called by its acronym ISKCON or more

informally the Hare Krishnas. Smaller NRMs, such as Heaven's Gate, attracted the attention of fewer observers. Scholars also came to apply the term to other groups even if they had little connection to the counterculture itself, for example the more middle-class Scientology and the more racially diverse working-class Peoples Temple.

The initial treatments of NRMs set the tone for decades of following scholarship. Because the new religions first attracted the attention of sociologists, researchers focused on issues of affiliation, socialization, retention, leadership, social cohesion, and defection. The early studies provided invaluable data on how the new religions attracted, kept, and lost members, and how the group's leaders maintained (or lost) their authority. Because of their authors' disciplinary concerns, most of these studies did not primarily consider the content of the new religion's theologies and wider worldviews, nor how *individual* new religions fit within the larger historical picture of American culture and American religious history. The earliest monographs of new religious movements considered them as a collective indicator of wider social changes. Two of the finest studies, Robert Ellwood's *Religious and Spiritual Groups in Modern America* (1973) and Robert Wuthnow's *Consciousness Reformation* (1976), each considered NRMs as harbingers of social developments. Like other early scholars of new religions, Ellwood and Wuthnow contributed towards a greater understanding of new religions as a collective category, but did not focus on individual movements in these texts.¹¹ Sociologists researching new religions also produced anthologies that treated themes across NRMs. Similar to the work of Ellwood and Wuthnow, Charles Glock and Robert Bellah's edited *New Religious Consciousness* (1976) considered new religions jointly as indicators of wider social currents. Their work influenced scholars for a generation, but it treated NRMs as

examples within a paradigm shift rather than consider new religions on their own terms. Similarly, Bryan Wilson's *Social Impact of New Religious Movements* (1981) raised the important issue of how wider society related to its new religions.¹² He succeeded in showing how social responses outweighed the actual numerical size of the NRMs. In all of these examples, the researchers highlighted the new religious movements as a collective group, rather than the content of specific new religious movements' messages or their historical backgrounds and distinctive qualities.

Some scholars did focus some attention on the ideological foundations of the new religious movements. For example, David Chidester's *Salvation and Suicide: An Interpretation of Jim Jones, the Peoples Temple, and Jonestown* (1988) stood out from other treatments of the Peoples Temple for its extensive use of theory in explaining the religious ideology of the group and how wider American society received the news—and then the corpses—of the Jonestown murder-suicides. While Chidester masterfully used both race theory and the work of scholar of religion Mircea Eliade to explore the Peoples Temple, he did not fully consider the changes within the religious movement over time. Instead he stressed the eventual ideology of the movement, a decision partly owing to the author's methodological choice of using a phenomenological rather than historical approach. Chidester covered the entire history of group before its exodus to Jonestown in ten pages. Nearly two decades after its printing, Chidester's book remains one of the best secondary sources on the movement and its intellectual content, but even with all its merits it does not consider the history of the group's intellectual developments.¹³

The 1990s witnessed a slight increase in interest in the study of the historical development of the new religions. Yet even these historical examinations of specific new

religious movements paid little attention to the evolution of ideas. Reflecting the sociological disciplinary homes of their authors, such studies tended instead to offer social histories of the NRMs, often combined with institutional histories as well. George D. Chryssides's *The Advent of Sun Myung Moon: The Origins, Beliefs, and Practices of the Unification Church* (1991), for example, considered the Unification Church by chronicling the history of its founder and the emergence of Unificationism in America. The author drew from extensive sociological data on membership and interviews with current and former adherents. Further, Chryssides documented the creation of the group's major institutions in America and abroad. Yet when he wrote on Unificationist beliefs and practices, the author took a snapshot of the Unification Church's ideological position at one moment in time rather than tracing how the movement's views developed throughout its history. Though Chryssides produced an accessible history, it did not show how and why the movement's theological and ideological positions developed over time.¹⁴

Lately a new direction has emerged in the study of new religious movements that focuses more attention on the historical development of the groups' theological positions. Edwin F. Bryant and Maria L. Ekstrand's anthology, *The Hare Krishna Movement: The Postcharismatic Fate of a Religious Transplant* (2006), includes several chapters on the intellectual historical background of ISKCON within Indian religiosity as well as the manner in which paradigms of leadership developed historically.¹⁵ Because of its nature as a compilation, the collection also includes studies that use a less historical approach, but the Bryant and Ekstrand text does indicate a greater attention to the historical development of the intellectual content of at least one particular new religious

movement. Susan J. Palmer's monograph *Aliens Adored: Raël's UFO Religion* (2004) offers one of the few monographic examples of a historical treatment of a single new religious movement that takes intellectual changes into serious consideration. In this text, Palmer traces not only Raël's personal journey toward founding a the Raëlian movement, but the evolution of the group from a small group of followers interested in extraterrestrials to a NRM capable of running a medical cloning research company. Palmer focuses especially on the theological changes in the group, noting how internal factors as well as outside influences led to transformations within the Raëlian movement.¹⁶

This dissertation contributes to this new direction in the field, using the tools of intellectual history in order to consider the evolution of ideas about science within three specific religious communities. Intellectual history methodologies have led me to examine documents and other materials produced by the movements—books, magazines, transcripts from conversations, correspondences, and videos—that reveal the ideas and views presented by the three new religions. The new religions' positions on religion and science developed over time, reflecting transitions within the movements as well as wider social and cultural circumstances. The rise of the counterculture, increasing interests in environmentalism, and developments in the cultural perceptions of science all impacted how members of the NRMs spoke and wrote of science. In addition to revealing much about the groups themselves, this study shows how the techniques of studying “old religious movements” also apply to new religions.

One drawback of the intellectual history approach is its tendency to focus on elites, the individuals who possess the time, inclination, and tools to produce systematic

approaches to theology and then express them in written or otherwise-recorded formats. Yet in the case of the new religions considered here, the elites who considered science and its relation to religion also founded, led, and shaped the movements. Focusing on what they had to say also recognizes that they represented the most important positions within their religious groups. In addition to writing on science and religion, these leaders also founded their group's institutions, edited their journals and books, toured the country on evangelizing crusades, and served as pastoral leaders of individual communities. The elites who produced material considering the meaning, role, and place of science had tremendous influence within the movements and opportunity to put their views into practice.

This study also contributes by demonstrating how many of these literate elites existed within the NRMs. Most scholars accept that new religious movements widely differed from one another, but few have paid attention to the reality of the varying voices within individual new religions. Each of the groups—the Unification Church, ISKCON, and Heaven's Gate—were diverse, with numerous leading thinkers within each group who disagreed on fundamental points of their theology and how to present them to the outside world. For example, Unificationism's founder Sun Young Moon took a different approach to science than did the first Unification evangelist to America, Young Oon Kim. Both differed from the perspectives held by two of the other major intellectual leaders of American Unificationist, David S.C. Kim and Sang Ik Choi, to say nothing of the American converts who subsequently entered the movement. Assumptions about *the* Unificationist position therefore miss that this new religious movement, like “old religious movements,” held the allegiance of individuals who disagreed with one another

while still remaining within the same tradition. One of the greatest myths in the study of NRMs is that new religions represented the intellectual output of single monolithic charismatic leader. The Unification Church, the Hare Krishnas, and Heaven's Gate demonstrate otherwise.

Three New Religions: Chapter Overview

This study considers three new religious movements so as to triangulate the different ways that the adherents of new religions, alongside religious people more broadly, talked about science. By examining three groups synoptically one finds that new religions responded to similar historical circumstances and ideological questions in very different manners. Though I recognize that my work makes an implicit comparison between the three groups, I have chosen to structure the dissertation around three separate treatments of the new religions. This allows them to stand on their own as three different traditions that developed apart from one another. The conclusion brings the three together and offers a theoretical frame for understanding religion and science issues more broadly.

The three new religions considered here shared several commonalities. First, they each grew and thrived during the American counterculture of the 1960s and 1970s, though all three movements continued to exist well past those decades, and each has origins in their founders' experiences before that time. They continued to relate and react to the same wider cultural events, ranging from the political to the social to the scientific. In addition to reservations about the 'temple of science,' they responded to the assassination of John F. Kennedy, the Summer of Love, Woodstock, and the rise and fall

of Richard Nixon. The era witnessed the widespread availability of the birth control pill, the moon landings, the birth of ecology, and rapid developments in computer technology. Second, each of the movements offered a totalistic vision of the world, which included everything from explanations of the meaning of life and death to instructions on how a person should date and marry, what to eat, and predictions of the future shape of global society. Therefore the movements offered wide-ranging pronouncements on science that fit within broader imaginings of how the groups and their members ought to relate to American culture. Third, while each group had centralized leadership, the membership of the movement took active roles in formulating and explicating the religious groups' ideological positions. This participation resulted in a chorus of voices that, although sometimes contradicting one another, indicated the boundaries of the movements' positions.

The three groups had major cultural and intellectual differences as well. Two of the groups, the Hare Krishnas and Unificationism, formed abroad, but experienced their greatest numerical growth and intellectual development in the United States during the countercultural period. The third, Heaven's Gate, emerged and grew within the United States. The Unification Church imported Korean cultural and social norms as well as religious ideas, and the Hare Krishnas did the same with Indian perspectives. Heaven's Gate, however, responded to the American social mores of its founders by both assuming and rejecting those norms. Both Heaven's Gate and the Unification Church developed out of Christian backgrounds and incorporated many elements of Christian theology in their approaches, though one (Heaven's Gate) combined such Christian presuppositions with influences from the New Age, whereas the other (Unification Church) synergized

Korean spiritualism and Daoism. In contrast, the Hare Krishna movement grew out of a pre-existing sectarian movement within Hinduism and in America drew from the countercultural positions of its many new members. These specificities combined with the shared cultural location and era to yield three distinct approaches to science and religion.

Three sections comprise the core of the dissertation, each of which treats one of the NRMs in two chapters. I move chronologically within each, and the sections themselves follow the order in which the new religions appeared in the United States: the Unification Church in the late 1950s, the International Society for Krishna Consciousness in the mid-1960s, and Heaven's Gate in the 1970s. The founders' births represent the beginning points for each of the sections. In the case of the International Society for Krishna Consciousness and Heaven's Gate, the death of their founders mark a natural end point for this study. Since the Reverend Sun Myung Moon, founder and leader of Unificationism, is still alive as of the time of this writing, I stop the narrative thirty years after the group's founding, approximately one generation after the movement began. In each case, I cover the periods during which the movements achieved their greatest success and made the most concerted effort to define themselves intellectually.

The first section considers the Unification Church, sometimes also called "the Moonies." Many Americans remember the Unification Church because of its mass wedding celebrations wherein Reverend Moon solemnized the marriages of hundreds or even thousands of couples in arenas and stadiums. Such weddings represented part of Unificationism's millennial attempt to construct the new kingdom of God on Earth, which also hints at how the movement treated science. Unificationism attempted to *guide*

science, envisioning science as a helpful tool with which humanity could build a better future, alleviate suffering, and glimpse the divine mysteries of the universe.

Unificationists believed that they could guide science by helping it prioritize its research agenda as well as bring scientists together to consider central problems that cut across all fields.

The first chapter, “Science in Early Unificationism, 1959-1969,” traces the emergence of the Unification movement from the nucleus of Reverend Sun Myung Moon to its burgeoning in the United States of America in the form of three distinct Unificationist movements. I begin with the early life and mission of Reverend Sun Myung Moon. Biographical details provide evidence of the importance of science in his formative years, as well as how such influences emerged in the church he founded. Next, the chapter considers the movement’s transition from Korea to the United States at the cusp of the 1960s, focusing on the materials produced by its three early missionaries to America. The first of them, Dr. Young Oon Kim, worked from the Church’s Korean language material and produced *Divine Principles* (1961), the first complete English translation of a Unificationist sacred text. I contextualize Kim’s work with Reverend Moon’s contemporary materials produced in Korea from the around the same time period, positioning Kim’s American Unification movement in light of the global Unification Church. Although science only minimally concerned Kim, I find the opposite with Reverend Moon himself. Returning to North America, I treat the work of the two other major Unification missionaries, David S.C. Kim and Sang Ik Choi, each of whom authored alternative sacred texts for the Unificationist movements that they led.

The second chapter, “Science in the American Unification Church, 1970-1989,” focuses on the place of science in the theological and institutional developments born out of the merger of the three Unificationist movements, those led by the two Kims and Choi. Instrumental in solidifying the movement, the groups’ newly retranslated sacred text, *Divine Principle* (1973), directly commented on science, scientific thinking, and the relation of science to religion, which forcefully shaped the resultant movement. The Unification Church built a number of institutions and organizations during this period. I focus on several of these, beginning with the Collegiate Association for the Research of Principles (CARP), the Unification Church’s public face on college campuses and in the youth subculture of the 1970s. By examining CARP’s newspapers and proselytizing material, I argue that the Unification Church formulated several specific positions on science, namely a high valuation of science alongside insistence that religious ideals ought to guide science. The Church also embraced a more systematic approach to studying and teachings its theological tradition, creating its own divinity school in 1975. Students and faculty at the new school, the Unification Theological Seminary, hoped to bridge the gap between science and religion and demonstrate that their Unificationist tradition embraced the modern scientific world. Finally, I turn to the topic which opens the section on Unificationism, the International Conferences on the Unity of the Sciences (ICUS) and the manner in which Unificationism sought to bring its approach to science and religion to a wider audience. I conclude by analyzing the underlying logic of science and religion in Unificationist thought, with reference to wider American cultural currents and views.

The third and fourth chapters shift to the International Society for Krishna Consciousness, known informally as the Hare Krishna movement, and more formally as ISKCON. This new religion emerged when its founder, the Swami (monk) A.C. Bhaktivedanta transplanted an existent form of Hinduism into America and introduced it to members of the American counterculture. Unlike Unificationism, which adopted a positive view of Western science, ISKCON rejected the scientific paradigm and establishment of the West and instead insisted that it offered an alternative. The Hare Krishnas sought to *replace* American science with an alternative model predicated on Indian religious texts, which their founder and converts found both more accurate and better attuned to social needs than the empiricism and naturalism of Western science.

I begin the third chapter by examining the life circumstances of Swami Bhaktivedanta, considering his exposure to Western-style education in British colonial schools. Bhaktivedanta would come to reject the English educational foundation that he encountered, instead embracing a traditional sect of devotional Hinduism known as Gaudiya Vaishnavism. This Hindu sect itself formed in response to cultural encounters, first with Muslims in the sixteenth century and then with the British three centuries later. Having considered Bhaktivedanta's background in Gaudiya Vaishnavism, the chapter next treats his earliest published writings, the English-language *Back to Godhead* magazine, which the swami published in India. Bhaktivedanta focused on science in many of that journal's articles, and I examine his underlying approach through a close reading of several of his most detailed contributions on the topic. I find that Swami Bhaktivedanta attempted to both claim the mantle and prestige of science as well as contest the value of the Western naturalistic science that the British had imported to

India. The chapter concludes by considering Bhaktivedanta's early work in the United States, to which he came as a missionary in 1965, especially in light of the material produced by his new disciples, the American-born converts Hayagriva Das (né Howard Wheeler), Rayarama Das (né Raymond Marais), and Goursundar Das (né Gary McElroy). These converts added their own countercultural opposition to America's scientific establishments to their guru's suspicions of science.

The next chapter, "Science and ISKCON, 1970-1977," considers how the International Society for Krishna Consciousness expanded and institutionalized its founder's views on science and religion, covering the group's most productive and successful era, which ended with the death of its leader Swami Bhaktivedanta in November 1977. The chapter begins with the swami's own evolving position on religion and science, views that developed in concert with both his movement's experience in America as well as historical developments in contemporary science. I treat several of his conversations with figures outside the Hare Krishna movement and his published articles in the group's American magazine, and also consider a series of conversations that the elder swami had with his senior disciples in 1973. In these dialogues, originally meant for internal use as a guide the members of ISKCON on matters of science, the swami assumed a stridently dismissive view of science and particularly biology. The conversations showed how both the group's founder and the new cadre of leaders rejected the major paradigms of American science, particularly its empirical and naturalistic foundations. Like the second chapter, which contemplated how the Unification Church's positions on science expanded from a few leaders into wider institutions, the fourth chapter next treats the perspectives on science demonstrated by the

Hare Krishna's new generation of leaders as well as its institutionalized form, the Bhaktivedanta Institute. I find that the new intellectual leaders of ISKCON took differing views on science within the Hare Krishna movement, ranging from envisioning science as irrelevant, to rejecting it outright, to accepting science as a possible support for the movement's own positions. In particular I consider the work of Svarupa Damodara (Thoudam Damodar Singh), a Hare Krishna devotee, holder of a Ph.D. in chemistry, and administrator of the Bhaktivedanta Institute. I conclude by considering both ISKCON's attempt to convey its positions on science to an outside audience as well as the disintegration of consensus following the guru's death.

The final section of the dissertation, "Science and Heaven's Gate," notes a third way that new religions could respond to science, by *absorbing* science into religion. While many people had not heard of Heaven's Gate until the 1997 suicides that ended its existence, the movement had over twenty years of history and represented the intellectual development of two Americans, born and raised as Protestants in Texas, who developed an alternative religion rejecting much of what Americans consider normative. Heaven's Gate upheld a monastic vision of life, rejected sexuality, consumption, and self-orientation. However, Heaven's Gate extolled American science, in particular the epistemological foundation of science. Heaven's Gate looked to absorb materialistic naturalism—the approach that looks to only the physical world and physical laws as sources of knowledge—into religion.

Chapter five, "Science and Heaven's Gate Until 1985," treats the period during which the group's founders Marshall Herff Applewhite and Bonnie Lu Nettles led the group together, from the mid-1970s until Nettles's death in 1985. The chapter first

considers Nettles and Applewhite's cultural and religious backgrounds. Though both had been raised as Christians, Nettles had left her Baptist heritage behind and become involved in the New Age movement, whereas Applewhite had followed his father's vocation and trained at a Presbyterian seminary before dropping out to study music. I focus on the two's transformation into "the Two," as they came to call themselves, and their successful spread of a religious movement that questioned the very category of religion. Fundamentally, the Two attempted to absorb the methodological naturalism and materialism of science and recast religion in that ethos, an act that they accomplished through a rereading of both Christian and New Age concepts. The chapter concludes with a close examination of a meditative prayer that the Two and their followers used during the early 1980s. The prayer combined a fiercely naturalistic approach using the language of chemistry and biology with the overtly religious form of prayer.

Chapter six, "Science and Heaven's Gate, 1986-1997" treats the era between the death of Bonnie Lu Nettles and the mass suicide that ended the group's existence. I analyze the shifts in the group's naturalistic approach engendered by the loss of Nettles, whose death resulted in a moment of cognitive dissonance for the group. The group had long insisted that its members would enter the heavens in living bodies, something that failed to occur for Nettles. Applewhite and the other members of the group therefore shifted towards a more supernatural or non-material interpretation of bodily salvation predicated on the transmigration of the souls, a clear break from Heaven's Gate's earlier position. Overall, however, the movement continued to attempt during this time to recast religious concepts in the languages of materialistic naturalism. Several sources from the 1980s and 1990s revealed the continuing emphasis on the incorporation of scientific

language and the methodological foundations of science into the movement. This chapter also considers sources from this latter period of Heaven's Gate that began to assume a vocally anti-religious perspective. These sources indicate how the group attempted to situate itself as more scientific than religious, despite making claims about salvation, God, and the nature of human life that most observers would consider religious by nature. Finally I consider the material produced in the final years of the group's history by the adherents of Heaven's Gate, especially three long-time members of the group calling themselves Innody, Chkody, and Jwnody. These three individuals, and others within the movement, wrote a number of statements that revealed their movement's position as highly critical of both the temples of science and religion. The chapter ends with an analysis of how the group's view of science and the absorption of scientific approaches into religion led to the 1997 mass suicides that ended Heaven's Gate.

Taken as a whole, the dissertation concludes that new religious movements engaged as participants in a wider conversation on religion and science during the 1960s, 1970s, and beyond. New religions, while new, were still religions and had as much at stake in these discussions as similar groups. The three positions of the Unification Church, Hare Krishnas, and Heaven's Gate represented ideological continuities with other religions. Their concern with how individuals in the modern world could rectify their religious identities with science and technology recalled the thoughts of others far removed from new religions. In an earlier era a famous American minister declared the scientific study of nature as a key to the proper understanding of religion. "The Book of Scripture is the interpreter of the book of nature," insisted Jonathan Edwards.¹⁷ In as

much as the leaders and adherents of the new religious movements also grappled with the relation of scientific and religious knowledge, they are among the heirs of Edwards.

¹ For a treatment of the creation of recombinant DNA (rDNA), see Susan Wright, “Recombinant DNA Technology and Its Social Transformation, 1972-1982” *Osiris* 2 (1986). On the history of the computer language C, Dennis M. Ritchie, “The Development of the C Language,” in *History of Programming Languages*, ed. Thomas J. Bergin, Jr. and Richard G. Gibson, Jr. (New York: ACM Press, 1996). (Appropriately, it is easiest to access that paper digitally using the internet, at <http://cm.bell-labs.com/cm/cs/who/dmr/chist.html>.) For details on the Fermi National Accelerator Laboratory, see Daniel J. Kevles, *The Physicists: The History of a Scientific Community in Modern America* (Cambridge: Harvard University Press, 1995), 420-23, Catherine Lee Westfall, “The First ‘Truly National Laboratory’: The Birth of Fermilab” (Ph.D. Dissertation, Michigan State University, 1988).

² Einstein’s 1918 address titled “Principles of Research” is available in a condensed form as the introduction to Planck’s book. Max Planck, *Where Is Science Going?*, trans. James Murphey, English ed. (London: George Allen & Unwin Ltd., 1933).

³ Boris P. Stoicheff, “Gerhard Herzberg and ‘the Temple of Science’” (paper presented at American Physical Society, Palais des Congres de Montreal, Montreal, Quebec, Canada, March 22-26, 2004).

⁴ Both a supply of new students, owing to the G.I. Bill, and a demand for new scientists fed into this pattern. See John S. Brubacher and Willis Rudy, *Higher Education in Transition: A History of American Colleges and Universities* (New Brunswick: Transaction Publishers, 1997). For a particular example as well as a description of the broader trend, consider Rebecca S. Lowen, *Creating the Cold War University: The Transformation of Stanford* (Berkeley: University of California Press, 1997). This was of course part of a much longer process as well, as noted by Robert V. Bruce, *The Launching of American Science, 1846-1876* (New York: Alfred A. Knopf, 1987).

⁵ Paul Boyer, *By the Bomb’s Early Light: American Thought at the Dawn of the Atomic Age* (Chapel Hill: University of North Carolina Press, 1994).

⁶ Heinz Haber, *The Walt Disney Story of Our Friend the Atom* (New York: Dell Publishing Group, 1956), 127.

⁷ Herbert N. Foerstel, *Secret Science: Federal Control of American Science and Technology* (Westport, CT.: Praeger, 1993), Greta Jones, *Science, Politics and the Cold War* (New York: Routledge, 1988), Stuart W. Leslie, *The Cold War and American Science: The Military-Industrial-Academic Complex at MIT and Stanford* (New York: Columbia University Press, 1993).

⁸ Here I use the term “establishment” in the colloquial sense. Though critics attacked the churches as part of the establishment, America’s religious institutions were not established in the formal, legal sense of being state-churches.

⁹ Kurt Vonnegut, Jr., *Cat's Cradle* (New York: Holt, Rinehart and Winston, 1963).

¹⁰ Schumacher wrote, “[i]n the excitement over the unfolding of his scientific and technological powers, modern man has built a system of production that ravishes nature and a type of society that mutilates man.” His *Small is Beautiful* called for a reclamation of anthropocentrism over technology. E. F. Schumacher, *Small Is Beautiful: A Study of Economics as If People Mattered* (London: Blond and Briggs, 1973), 275.

¹¹ Robert S. Ellwood, Jr., *Religious and Spiritual Groups in Modern America* (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1973), Robert Wuthnow, *The Consciousness Reformation* (Berkeley: University of California Press, 1976).

¹² Charles Y. Glock and Robert N. Bellah, eds., *The New Religious Consciousness* (Berkeley, California: University of California Press, 1976), Bryan Wilson, ed., *The Social Impact of New Religious Movements* (New York: Rose of Sharon Press, Inc., 1981).

¹³ David Chidester, *Salvation and Suicide: An Interpretation of Jim Jones, the Peoples Temple, and Jonestown* (Bloomington: Indiana University Press, 1988). Another example of an excellent treatment of the ideology of NRMs with only minimal attention to history is Mary Farrell Bednarowski, *New Religions & the Theological Imagination in America* (Bloomington: Indiana University Press, 1989). In terms of the groups considered in this dissertation, Frederick Sontag’s monograph on Unificationism suffered from the same ahistorical approach to the movement’s ideology. Frederick Sontag, *Sun Myung Moon and the Unification Church* (Nashville: Abingdon Press, 1977).

¹⁴ George D. Chryssides, *The Advent of Sun Myung Moon: The Origins, Beliefs, and Practices of the Unification Church* (New York: St. Martin's Press, 1991).

¹⁵ Edwin Bryant and Maria Ekstrand, eds., *The Hare Krishna Movement: The Postcharismatic Fate of a Religious Transplant* (New York: Columbia University Press, 2004).

¹⁶ Susan J. Palmer, *Aliens Adored: Raël's UFO Religion* (New Brunswick, N.J.: Rutgers University Press, 2004).

¹⁷ Jonathan Edwards, “Images of Divine Things,” as reprinted in John E. Smith, Harry S. Stout, and Kenneth P. Minkema, eds., *A Jonathan Edwards Reader* (New Haven: Yale University Press, 1995).

SECTION I: SCIENCE AND THE UNIFICATION CHURCH IN AMERICA

“Religion and science have been the methods of searching for the two aspects of truth, in order to overcome the two aspects of ignorance and restore the two aspects of knowledge.”

-- Sun Myung Moon, *Divine Principle* (1973)

INTRODUCTION TO SECTION I

Boston, Massachusetts, Thanksgiving Day, 1978. Eugene Wigner, Emeritus Professor of Physics at Princeton, Manhattan Project veteran, and Nobel Laureate, placed his notes on the podium and began his address. His brief speech opened a conference dedicated, in his words, to fostering unity between the natural sciences and the sciences of life and the discussion of “the effects of religion on human needs, on happiness.”¹ Wigner added that he hoped to stimulate a conversation on the psychology of animals, which would benefit the scientific study of human psychology as well. A long table of VIPs dominated the front of the banquet hall, with Wigner’s podium in the center. At the physicist’s left sat the neuroscientist Sir John Eccles, another Nobel Laureate; Fredrick Seitz, former president of the National Academy of Sciences and Rockefeller University; Kenneth Mellanby, the ecologist who founded and directed the British science establishment of Monks Wood Experimental Station; and the M.I.T. sociologist Daniel Lerner. R.V. Jones, the wartime scientific adviser to Winston Churchill, Richard Rubenstein, a leading American Jewish theologian, and Michael Warder, journalist and conference director, sat to Wigner’s right. In the audience, four hundred and fifty scientists from over fifty countries listened to the opening addresses of the Seventh International Conference on the Unity of the Sciences (ICUS VII). In the coming four days, they would speak on such subjects as Burkitt’s Lymphoma in Paraequatorial Africa, the supernationality of science, species selfishness, and theories of religious consciousness.

One small detail, however, distinguished the ICUS from the many other academic conferences that occurred in 1978. Also at the dais sat the Reverend Sun Myung Moon, founder and leader of the Unification Church, the controversial new religious movement known to America as “the Moonies.” The International Cultural Foundation (ICF), a Unification funded organization, provided the half million dollars that sponsored the Seventh International Conference on the Unity of the Sciences, as it had done for the six preceding and fifteen following meetings of ICUS.² In the ICF’s words, “the purpose of ICUS [was] to provide an opportunity for scholars and scientists to reflect on the nature of knowledge and to discuss the relationship of science to the standard of value.”³ At the conferences scientists delivered papers on topics ranging from the technical and obscure to the nearly universal. Many extolled the conference as one of the few that encouraged true interdisciplinary conversation. Professor Max Jammer, president of the Association for the Advancement of Science in Israel, offered a representative comment, calling ICUS “a uniquely stimulating event by providing the rare possibilities of an interdisciplinary exchange on problems of profound significance for the intellectual situation of our time.”⁴ Previous conferences featured addresses and papers by sociologists, historians, theologians, and Nobel-winning scientists. For example, the fourth ICUS included presentations by the inventor of holographs, Dennis Gabor, as well as the chemist who first isolated Vitamin C, Albert Szent-Gyorgi, both past winners of Nobel Prizes.⁵ In addition to the physical scientists, J.B. Rhine, the famous ESP researcher from Duke University, Theodore Roszak, academic spokesman for the counterculture, and historian Oscar Handlin, the Pulitzer Prize winning scholar of immigration, had all attended preceding ICUS meetings. But outside the Sheraton

Boston Hotel demonstrators protested against the Unification Church as a dangerous cult and the conference as a publicity stunt and scientific sham. “These cultists must be destroyed, imprisoned – anything to STOP their mind control of society,” read the protestors’ leaflet.⁶ In protest of the ICUS conference, a former member of the Unification Church now affiliated with the anti-cult movement released a statement comparing the Unificationists to Nazis. The scientists, he warned, were “legitimizing a demagogue and are lending credence to a movement whose goals and methods find their parallel in the National Socialist Movement in Germany under Hitler.”⁷ One possible explanation of the demonstrators’ fiery rhetoric: less than two weeks earlier, almost one thousand people had committed mass suicide at Jonestown, a commune in Guyana, South America, run by another new religion, Jim Jones’ Peoples Temple.⁸ “Dangerous cults,” as media sources referred to them, were on Americans minds.⁹ Ironically, one ICUS panel featured well-respected scholar of religion Ninian Smart discussing “Death and Suicide in Contemporary Thought,” which conference organizers hastened to explain had been organized well before the Guyana tragedy.

What would bring the Unification Church to sponsor a scientific conference, one at which, its attendees insisted, in the words of Sir John Eccles, “the conferences have been notable for complete freedom to all participants”?¹⁰ Scientists themselves determined the topics and subjects of their papers, sessions, and panels, and a committee of academics oversaw the process. Critics suggested that Reverend Moon and his church sought the publicity and legitimization that hobnobbing with savants brought. This does provide part of the answer. Certainly Moon and his church enjoyed and benefited from the exposure, but the sources indicate that the Unificationists sponsored ICUS because

the conferences forwarded the movement's program of reconciliation between science and religion and unity within science itself. Although the church set no limits on the participants or their papers, it provided the overall theme, always one that stressed the need for moral or religious guidance of science. The Boston conference considered "the re-evaluation of existing values and the search for absolute values," or, as the conference's organizer Michael Young Warder explained to the press, ICUS "provide[d] an opportunity for scholars and scientists to discuss questions of values," and considered "concerns about the crisis of values in the modern world."¹¹ Other meetings of the international conferences considered such subjects as "modern science and moral values" (ICUS I), "harmony among the sciences" (ICUS V), "the responsibility of the academic community" (ICUS VIII), "absolute values and the new reassessment of the contemporary world" (ICUS XVI), and "absolute values and the unity of the sciences: the origin of human responsibility" (ICUS XX). Through such topical guidance, the Unification Church and its International Cultural Foundation sought to shepherd science towards working within a moral paradigm set by the church: a holistic quest for knowledge and progress operating under a religiously-attuned set of absolute behavioral and philosophical guidelines that, in the view of the Unification Church, highlighted peace, piety, and progressivism.

Fundamentally, Unificationist leaders and members took a pro-science position, meaning support for the goals, means, and members of the scientific community, but they did so with the hope and aspiration that their religious movement would guide science towards its divinely-mandated goal, the discovery of knowledge, the progress of human material life, and ultimately, alongside the efforts of religion, the creation of a heaven-on-

earth. This included support of American's scientific establishment, upon which the Unificationists looked positively. Like other American Christians,¹² Unificationists believed religion to be compatible with a modern scientific worldview, envisioning science and religion as separate spheres that did not impinge upon the other. At times science presented problems to religion, for example the often thorny issue of human evolution and natural selection. Yet overall, Unificationism saw science as a powerful force for good. As demonstrated here, the Unification Church embodied a progressive millennialism in keeping with the American postmillennial tradition. Like the Social Gospellers a half century earlier, the Unification Church saw science and technology as tools of establishing a model Christian society. Believing themselves responsible for fostering a heaven-on-earth, Unificationists looked to science as a valuable asset, and the scientific community as a natural ally.

¹ International Conference on the Unity of the Sciences, *The Re-Evaluation of Existing Values and the Search for Absolute Values: Proceedings of the Seventh International Conference on the Unity of the Sciences, November 24-26, 1978, Boston, Massachusetts*, 2 vols. (New York: International Cultural Foundation Press, 1979), 13-15.

² The International Cultural Foundation sponsored the twenty-second ICUS conference in November, 2000, the final year of the twentieth century and second millennium. Brian Gruber, "World Scientists Launch Assault on Global Problems," *World Student Times*, 12 December 1978, Alan MacRobert, "Moon Science Conference: Walking into 1984," *The Real Paper*, 9 December 1978. The exact cost of the Boston conference has not been publicized, but the *Boston Globe* provided estimates in its coverage, Robert Cooke, "Moon Conference: Demonstration That Jargon Is Universal," *Boston Sunday Globe*, 26 November 1978, 32.

³ International Cultural Foundation, "What ICUS Is," (Booklet, 1978) New Religious Movements Organizations: Vertical Files Collection, GTU 99-8-1, The Graduate Theological Union Archives, Berkeley, CA, 3.

⁴ Ibid., 16. The *What ICUS Is* booklet provided dozens of similar quotes by major scientists, all intended to present to outsiders that the International Conferences on the Unity of the Sciences offered social and scientific value and operated independent of Reverend Moon.

⁵ Ted Agres, "Science & Values: Turning Point?," *Industrial Research* 18, no. 1 (1976): 24.

⁶ Richard Bevilacqua and Earl Marchand, "Moon Eludes Pickets at Boston Conference," *Boston Herald American*, 25 November 1978, 1. See also Howie Carr, "Anti-Moonies to Picket His Science Conclave," *Boston Herald American*, 23 November 1978, Robert Cooke, "Foes Ask a Boycott on Moon Meeting," *Boston Globe*, 23 November 1978.

⁷ Allen Tate Wood, "Statement by Mr. Allen Tate Wood, Former Member and Official of the Moon Organization, 22 November 1978," (Typewritten Note, 1978) Cult Awareness Network (CAN) Collection, ARC Mss 19, Department of Special Collections, University Libraries, University of California, Santa Barbara.

⁸ For more on Jonestown, see David Chidester, *Salvation and Suicide: An Interpretation of Jim Jones, the Peoples Temple, and Jonestown* (Bloomington: Indiana University Press, 1988).

⁹ On the media response to Jonestown and treatment of "cults," Ibid., 24-45, Sean McCloud, *Making the American Religious Fringe: Exotics, Subversives, and Journalists, 1955-1993* (Chapel Hill: University of North Carolina Press, 2004), 127-59.

¹⁰ Sir John Eccles, “Letter to Participants, October 15, 1976,” (Personal Correspondence, 1976) Warder [Michael] Collection, ARC Mss 31, Department of Special Collections, University Libraries, University of California, Santa Barbara.

¹¹ Robert Cooke, “Scientists Defend Role at Moon Parley,” *Boston Globe*, 25 November 1978, 3.

¹² There is some debate over whether the Unification Church is Christian. Much like the situation of the Church of Jesus Christ of Latter-day Saints, the Unification Church envisions itself as Christian, but the majority of other Christian groups, be they liberal, mainline, and evangelical, reject it as such. Such a theological determination is beyond the scope of this study. Historically, Unificationism emerged from a Christian context and roots itself in Christian history and theology, as I demonstrate. Because this study considers the Unification Church historically, I will refer to it as Christian, though recognizing that it may not satisfy some theological definitions.

CHAPTER 3: SCIENCE IN EARLY UNIFICATIONISM, 1959-1969

Reverend Sun Myung Moon and the Genesis of Unificationism

Sun Myung Moon¹ was born on February 25, 1920, in a Korea that stood at the cusp of modernization. Ten years earlier the Japanese Empire had annexed Korea and begun a forced process of infrastructure and economic development. The young Moon would have encountered the same industrial and technological revolution that had overtaken the United States a few decades earlier: railroads, electricity, factories, and the advent of modern business and industry. Korean historian Bruce Cumings places what he calls the “profound” transformation of Korea at “[t]he period from 1935 to 1945,” during which “Korea’s industrial revolution began, with most of the usual characteristics: uprooting of peasants from the land, the emergence of a working class, widespread population mobility, and urbanization.”² This era coincided with Moon’s formative teen years and early adulthood. Between Moon’s birth and his twenty-third birthday, his native Korea witnessed a 343% increase in industrial employment as well as profound social displacement due to falling agricultural prices and rising demand for industrial workers.³ The railroad in particular, Cumings notes, “penetrated” and “integrated” Korea, ferrying raw materials, finished products, and Korean workers throughout the peninsula.⁴

Moon’s early religious upbringing is uncertain, but then again much in colonial Korea was uncertain. Alongside modernizing the Korean economy, Japanese colonial authorities sought to “modernize” native Korean religious and social norms as well.

Combined with the social and geographic dislocations owing to industrial development, Korea experienced what Adrian Buzo calls a “profound cultural loss.” Buzo argues that under Japanese colonial rule, “Koreans lost an entire edifice of faith that had undergirded the life of the country for 500 years, linking people and their daily thoughts and activities to [the Korean] monarch, country and beyond to the universe. ... Sense of identity, purpose in life, and the significance of daily activities became crowded with unanswerable questions, and neither spiritual leaders nor colonial authority could offer guidance to people disturbed and uprooted by momentous change. For some, Christianity and other new religions filled the spiritual void.”⁵ Christianity held the allure of looking to the Occident, rather than Japan, as its spiritual center. The year before Moon’s birth, Korean Christian leaders joined with nationalists in a short-lived rebellion against the Japanese colonizers.⁶ The Moon family, and Sun Myung himself, were among the spiritually uprooted people of Korea, converting to Christianity when the future founder of the Unification Church was ten years old, one of many families to convert in Korea’s fastest-growing Christian regions.⁷ Later biographies chronicle that by the age of fifteen or sixteen Moon claimed the abilities of a religious visionary, communicating with spirits and receiving divine revelation. Moon himself taught that while praying as a young teenager, Jesus Christ manifested before him, asking him to pledge to end human suffering on Earth.⁸ He appears to have hidden this from his family, and only two decades later did Moon embrace an identity as prophet and visionary.

Around the same time that Moon received his first revelations he also began scientific and technological training. Moon’s experience of education in fact linked to his religious experiences: while learning under the traditional Korean Confucian system

during the winter, by summer he studied modern subjects with a minister at the local Presbyterian mission.⁹ At the age of eighteen he left his parents to enroll at a technical high school in Seoul, where he took an interest in electricity. While in Seoul he also began to attend a Pentecostal church; his family reported that during his return visits he would pray feverishly and frequently.¹⁰ A Pentecostal emphasis on healing and works of the spirit would become prominent characteristics of his later movement. Deciding to pursue an advanced degree, Moon enrolled at the junior college associated with Waseda University, a prestigious private university in Tokyo, continuing his study of electrical engineering.¹¹ Moon continued to experience religious visions in Japan. In 1944, he began a forty-day fast, during which he spiritually encountered Jesus, Muhammad, Buddha, and Confucius, all of whom encouraged him to begin a public career of preaching and teaching.¹²

The educational and religious trajectory of Sun Myung Moon encapsulated a number of cross-cultural flows and importations. Raised in Korea during Japanese colonial occupation, Moon encountered the scientific and technological modernization that the colonial power introduced to the peninsula. Japan itself had imported this modernist impulse from the West during its early Meiji period (1868-1912) before subsequently exporting it to Korea. During each step of cross-cultural flow, individuals and groups filtered science through native categories, such as Shinto nationalism in Japan and Confucian ideals of scholarship in Korea. Moon, unlike the Hare Krishna founder Swami Bhaktivedanta whom we will meet in chapter three, accepted the scientific modernism that he learned from the colonial power. Yet Moon combined his acceptance of the scientific worldview propagated by Japan with his embrace of another import, the

religion of the Europe, Christianity. Moon himself then filtered Christianity through his own Korean norms and sensibilities, which led him to create the Unification Church. Completing the cycle of transnationalism, Moon and his followers then exported their understanding of religion and science to Japan and then to the West.

Having completed his scientific training in Japan, Moon returned to Korea and began a career as an electrician, avoiding military conscription into the Japanese Imperial army during the Second World War by helping the war effort in the construction industry. Following the conclusion of the Second World War and freed from his need to avoid the Japanese draft, Moon moved from the world of industry and electrical engineering to pulpit and preaching. In June of 1946, not even a year after the United States ended the war with the atomic bombings of Hiroshima and Nagasaki, Moon left his wife and newborn baby to found a church in the northern Korean city of Pyongyang, obeying a revelation directing him to do so.¹³ (His wife subsequently divorced him.) There Moon gathered a circle of Christians through emotional public prayers and sermons wherein he preached the imminent return of Christ to Korea.¹⁴ The outbreak of the Korean War and Moon's open defiance of communist authorities led to two and a half years of imprisonment, starting in 1948. While imprisoned, Moon continued to preach, converting other prisoners to his own view of Christianity, which increasingly emphasized Moon's personal revelations and hinted that Moon might serve some integral place in the coming advent.¹⁵ The chaos of the American invasion and the outbreak of the Korean civil war permitted Moon and several of his followers to flee to South Korea.¹⁶ Four years later in Seoul, Reverend Moon founded the Holy Spirit Association

for the Unification of World Christianity, the official name of what Americans and Europeans call the Unification Church.

Throughout his sojourn in North Korea and first years of work in Seoul, Moon and his followers collected his sermons and lectures into a central text, “Wolli Wonbon” (“Original Text of the Divine Principle”), expanded, edited, and published in 1957 as *Wolli Hesul* (“Explanation of the Divine Principle”), and in 1966 as *Wolli Kangron* (“Exposition of the Divine Principle”). These texts formed the open canon of the Unificationist movement, in that subsequent editions expanded or reworked earlier sections, as they may continue to do so in the future.¹⁷ The basic ideology remained the same, however, throughout the various manuscripts. Church leader C. H. Kwak explained that the printed texts contained only part of “The Principle,” which referred to the movement’s core ideology in addition to the books that contained it: “[t]here are certain stages in unfolding, and a proper response by man is essential for that unfolding to proceed. ... More of The Principle revelation will be released according to the progress of the dispensation and the development of the foundation on earth.”¹⁸ In the Korean-speaking Unification movement, these books served as the ideological center of the church. Members of the Unification Church accept the books as doctrinal truth that fulfills previous (Biblical) revelation, roughly analogous to the manner in which other Christians understand the New Testament to complete the Hebrew Bible.

Reverend Moon, the Principle texts, and the Unification Church did not remain only in Korea. Seven years after Moon founded the Holy Spirit Association for the Unification of World Christianity, he dispatched four apostles to the United States of America. Continuing the cross-cultural exportation process, Young Oon Kim, Sang Ik

Choi, David Sang Chul Kim (normally referred to as David S.C. Kim, and of no relation to Young Oon Kim), and Colonel Bo Hi Pak each founded independent Unification communities throughout the United States. Although the groups would eventually merge with each other, with Pak's movement fusing with Young Oon Kim's after only a few years, for almost a decade several distinct Unificationist communities operated autonomously from both each other and the control of Reverend Moon.¹⁹ A variety of factors separated the groups, including ideological, geographic, and cultural differences. Choi and "Miss Kim," as Unificationists called Young Oon Kim, both operated out of the Bay Area, but their groups barely coexisted. Partially, demographics separated the groups. Miss Kim appealed to a Christian audience of older adults, whereas Choi preached to students and youth groups. Personal loyalties also divided the movements. A member of Kim's Oakland-based Unification movement recalled the need to avoid members of Choi's San Francisco community, explaining that "[f]ollowers of different groups did not speak to each other, each believing that their leader was the only one who was doing what Father [Moon] wanted." He noted that his own avoidance of members of the rival group only ceased when Reverend Moon arranged for him to marry a woman who was "one of [Choi]'s most faithful followers."²⁰

Ideological and theological differences also explained the gulf between the groups, each of which possessed its own version of the Unification sacred text. While the sub-movements within Unificationism had merged by the early 1970s, throughout the 1960s it is appropriate to discuss several competing Unificationist movements in America. In particular, Miss Kim, Choi, and David S.C. Kim produced three alternative translations—versions is perhaps a better term, given the sometimes loose nature of the

translations—of the Korean-language Unification sacred texts. Young Oon Kim’s *Divine Principles* (1961), David S.C. Kim’s *Individual Preparation for His Coming Kingdom* (1964), and Sang Ik Choi’s *Principles of Education* (1969), served as authoritative in their own groups until the movements merged in the early 1970s. Reviewing the treatment of science in these alternative representations of Unificationism demonstrates the tremendous influence of social location of the author and audience on the religious texts. However, two key themes united the three texts’ treatments of religion and science: a recognition of tremendous value of science and its indispensable place in the modern world, and a desire to portray Unificationism as compatible with science.

***Divine Principles* and Unification’s Arrival in America**

Ms. Young Oon Kim (1915-1989) an early convert to Unificationism and a trained theologian, entered the United States before the other Unification missionaries to America, arriving in Eugene, Oregon in January 1959, the same month that Pope John XXIII issued the call in Rome to assemble the Second Vatican Council. She brought with her an incomplete manuscript she called *Divine Principles*, based on the lectures and sermons she heard in Korea and *Wolli Hesul*, the Unification sacred text.²¹ Kim published the first English edition of *Divine Principles* two years later, periodically revising and updating it again in 1962 and 1963.²² Although subsequent translations supplanted Kim’s, her *Divine Principles* defined the ideological foundation of American Unificationism well into the 1970s. Kim attempted to produce a close and accurate translation of the *Wolli Hesul*, but like all translations, *Divine Principles* combined the thought of the author of the original language edition with the positions and perspective

of the translators, a fact that later Unificationists also recognized.²³ Given that *Wolli Hesul* itself amalgamated Moon's sermons with material written by his follower, the text contained multiple voices.

Considering its basic form, *Divine Principles* reveals the theological moorings of Unificationism, combining Christian Biblical exegesis and philosophical inquiry. The text took stands on philosophical debates over omnipotence, providence, free will, and aesthetics, but always from an explicitly Christian direction. For example, its first chapter detailed "The Principle of Creation," assumed the Biblical narrative of humanity's origins. Subsequent chapters, "Fall of Man," "Mission of Jesus Christ," "Resurrection," and "The Second Advent of Christ" completed the Christian cosmological narrative. The sections titled "Prolongation of the Providence of Restoration" and "Completion of the Providence of Restoration" applied Christian theological categories to the two thousand years of history that followed the birth of Christianity. The text sometimes followed the traditional pattern of biblical exegesis, glossing Biblical verses and explaining their relevance within the work's religious system, cross referencing other sections of scripture as needed. For example, the first chapters on creation explicitly followed the Genesis narrative, sometimes verse by verse. At other times it invoked Biblical proof-texts from throughout the scriptures, invoking Job and Revelation in discussing the Edenic Fall from grace, for example.

Divine Principles, like the Korean text, concerned itself most centrally with the fall of humanity, as told in the Biblical Genesis narrative, and the subsequent corporate atonement of humanity through divine action. The Unification Church disagrees with other Christians— Unificationists are quite clear that they consider themselves

Christians—on several major theological points, but generally follows the contours of typical Christianity: the primordial couple fell from grace, introducing original sin; the sacrifice of Jesus Christ abrogated this fall and returned grace; and a future coming of the messiah will complete the cosmic salvific drama. Yet the Unification Church differs from typical Christian theology as well. According to the *Divine Principles*, the fall of Adam and Eve resulted from an inappropriate spiritual sexual relationship between Eve and Satan and then Eve and Adam: “Adam and Eve looked extremely beautiful to Lucifer. Eve was even more beautiful, and as she was more inclined to be tempted, Lucifer could not help feeling the stimulating impulse of love toward her. Lucifer ventured to join together with Eve in spite of the threat of death [i.e., in violation of God’s law], and this was the spiritual fall between Eve and Lucifer. Thus Lucifer became Satan.”²⁴ Because Eve consummated this relationship with Satan through physical sex with Adam, the contagion of sin passed on to their children and all humanity. *Divine Principles* explained, “[i]f they had become united, with the love of God, the earth would have been filled with the children of the innocent. But because Adam and Eve joined with Satan, through the act of illicit love, their descendants were fallen mankind, and the world was under Satanic rule.”²⁵ But beyond the nature of its origin, *Divine Principles*’ view of original sin did not strongly differ from other Christian groups.

To redeem fallen humankind, God elected a perfected man, Jesus, to restore the Kingdom of Heaven on Earth, understood by Unificationists to be the state of human affairs as originally envisioned by God before the fall. Deploying the traditional Christian concept of trinity but with a strikingly new interpretation, *Divine Principles* explained that “[i]f Adam and Eve had grown up to perfection and had been united into

one by the blessing of God, they could have faced God as a perfect object and united with Him, and thus they could have been in a trinity with God. ... Because of the fall, however, this Divine Trinity had not been fulfilled, and by uniting with the Holy Spirit, Jesus has restored the Holy Trinity for the first time but spiritually.”²⁶ Jesus therefore reestablished the divine-human connection, entering into a trinity with God and the spirit that subsequent humans could emulate. As should be obvious, the Unification belief differs from the orthodox Christian view of the trinity as the triune godhead. A later edition of the Principle explained that Unificationism accepted the Christian belief that Jesus was God, “since it is true that a perfected man is one body with God,” but rejected that he is identical with the Creator.²⁷

However, Jesus was not able to complete his entire mission. *Divine Principles* taught that Christ’s crucifixion was accidental: “[t]he suffering of Christ on the cross was not the will of God, nor was it a predestined event by God, but was the consequence of the faithlessness and unbelief of the Jews.”²⁸ That is, because of the ignorance of the first century Jewish people, Jesus was unable to complete his original assignment, namely to marry and produce perfect sinless children, and instead the Romans executed him. “Jesus could not accomplish his actually intended mission: the restoration of man both in spirit and body and the whole universe. He accomplished only half of his mission, which was only the spiritual salvation. Whoever believes in him is saved spiritually and goes to the Paradise, but his body still remains under Satanic dominion; therefore his spirit belongs to God while his body is under Satan’s domination.”²⁹ Rather than fully redeem humanity and restore the Kingdom of Heaven, Jesus was only able to save humanity in a *spiritual* sense. In another distinction from traditional Christian doctrines, *Divine*

Principles explained that a future second messiah, rather than a reappearance of Jesus Christ, would complete the process and create a *physical* Kingdom of Heaven on Earth. The text strongly implied that Moon was this second messiah, a position which the Unification Church did not formally endorse but nevertheless promulgated, and nearly all members continue to accept.

Neither Kim nor her converts paid much attention to science. Demographics provide the best explanation for this, especially when compared to the strong attention given science by contemporary Korean Unificationism and the later American movement. Kim first brought her *Divine Principles* to the attention of mainstream Christians and Christian groups, but after numerous failures, turned to an audience more interested in spiritualism and the occult.³⁰ As Unificationist and historian Michael Mickler explained in *A History of the Unification Church in America, 1959-1974*, “she began to seek out Pentecostal prayer groups and new age spiritual fellowships that were more open to new truth. Rather than with leaders, her contacts were with lay people who were more likely to respond.”³¹ She succeeded, and attracted a small kernel of dedicated laypeople, all of whom had an interest in works of the spirit or spirits, but none of whom had training or apparent interest in science. Of the six leaders of the group, only Kim had graduated from college, and half of them had never progressed beyond high school.³²

John Lofland provided detailed descriptions of Kim’s first converts in his study of the early Unificationist movement in America, *Doomsday Cult: A Study of Conversion, Proselytization, and Maintenance of Faith*. The vast majority possessed interest in occult subjects, often alongside Christian backgrounds or affiliations. One convert, for example, experienced “mystical perceptions, such as fiery red balls,” attended a Lutheran

seminary briefly, but eventually joined an organized spiritualist group. Another underwent “what he perceived as ‘super-real’ dreams” and felt the presence of spirits. “He started reading about spiritualism and attending spiritualist churches, where he became a firm believer in occult phenomenon,” explained Lofland. Other converts tended more towards spirit-filled Christianity, for example the woman who shortly before joining the Unificationists “began having private religious hallucinations, including sanctification—being made holy and free of all sin,” and attended multiple churches.³³ Kim herself described one encounter that typified the Christian occult environment: “I met a young man who spoke in tongues. When I gave him chapters on the Principle, he had very dramatic experiences. For example, he had a vision in which he saw ‘Chapter Two’ enacted as if in a movie. On the day before he read this chapter, this man was urged to hear more—by the spirit of St. Paul!”³⁴

Kim and the early Unificationists inhabited what some scholars, following the lead of Colin Campbell, have called “the cultic milieu,” and Mickler the “occult milieu.” Mickler explains, “[d]escribing themselves, according to one account, as ‘students of metaphysics . . . seeking enlightenment in the higher spiritual realms,’ this subculture included a broad cross section of American people, though with a preponderance of middle-aged and older women.”³⁵ Such a religious subculture differed from the 1950s “religious underground” that Robert Ellwood describes in *The Fifties Spiritual Marketplace*, which so emphasized male-bonding, individuation, and the exotic against the family, community, and normative religious-social matrix of the decade.³⁶ Unlike Ellwood’s religious underground, the occult milieu of the early Unificationists encouraged the formation of an alternative community rather than individualized quests,

appealed to women as well as men, and looked to spiritualism, New Thought, and charismatic Christianity rather than Zen, Thomas Merton, or hallucinogenic drugs. It also lacked the anti-establishmentarian message of the 1960s-1970s counterculture that followed.

Young Oon Kim herself typified the occult Christian milieu. Lofland described her as a woman who surrounded herself with spirit(s). “During her early teens she was subject to fits of depression and used to sit on a secluded hilltop and seek spirit contacts. She began receiving visions, hearing voices, and generally hallucinating, a pattern she was to maintain thereafter.” Later, she entered a Methodist divinity school, but “[p]rior to entering the seminary, she had become engrossed in the spiritualistic writings of Emmanuel [sic] Swedenborg, who soon began to appear to her in visions.”³⁷ Emanuel Swedenborg (1688-1772), the Swedish scientist, theologian, and spiritualist who published accounts of his dream journeys and visions, shaped eighteenth-century occult circles. He taught a liberal form of Christianity that emphasized universal salvation and the reality of human-spirit communication. Emphasizing rationalism and free will, his followers splintered into a number of factions. Although numerically small, Swedenborgianism has impacted the development of spiritualism, transcendentalism, and New Thought.³⁸ It remained influential among occult oriented groups well into the twentieth century.³⁹ Young Oon Kim followed her interest in Swedenborg’s thought for much of her life, writing a thesis on the topic while visiting the University of Toronto from 1949 to 1951 on a postgraduate fellowship.⁴⁰ She later thanked Swedenborg for guiding her religious thought, and bringing her to Reverend Moon’s Unification Church.⁴¹

In the fall of 1960, Kim's fledgling Unificationist community moved to San Francisco to escape poor relations between the group and outsiders, most notably the jealous husbands of some of the leaders.⁴² Once in San Francisco, according to Mickler's history, Kim and her group attracted a number of occultists, including the wife of a Stanford professor on a mission to assemble a small army of American spiritualist women, and the assistant minister at a spiritual church who channeled Lao Tzu and "an Indian Chief" named White Cloud.⁴³ An advertisement for one of Kim's presentations demonstrated the occult location of the early movement: "Wednesday, March 15, at 8:00 p.m., a lecture by Young Oon Kim, B.A., B.Th., B.D., of Korea on: The Divine Principles. Miss Kim is a teacher of the New Age, giving principles from Divine revelation as taught and verified by her from a Master teacher (whom she will reveal in her lecture). She will give a history of her Master teacher and show his direct revelations pertaining to the end of this civilization or the last days of it and the ushering in its place of the New Age. ... The New Age will bring one world, one religion, one language, and other unities as well as perfect harmony of spirit and of body."⁴⁴

Such demographics explain the paucity of attention to science in *Divine Principles*, since Kim worked on the translation in conjunction with her converts, focusing on the matters that directly concerned them. This included spirits, the relation of the occult to Christianity, and the dawning of a new age, but not science. Science and questions about science appeared infrequently in Kim's translation of *Divine Principles*, a marked contrast to Won Pak Choi's 1973 translation, similarly titled *Divine Principle* (note the singular noun), and even to Reverend Moon's sermons and speeches in 1950s

Korea. The text never explicitly considered the relation of science to religion, again unlike later English editions of the book.

Kim mentioned science in only four sections of *Divine Principles*, twice in reference to the tenor of the present age, once in comparison to spiritual development, and once in a passing discussion of renaissance history. The latter two discussions of science reveal very little. Kim dedicated part of chapter six (“Resurrection”) to demonstrating the progression of humanity back toward the ideal of a pre-Edenic state. She employed science as a point of comparison, indicating that “[t]he progress of science provides better living conditions for the people of today. With the passing of time, they will receive more benefit from scientific achievement with less effort of their own. This is simply the advantage and benefit of this scientific age in which they live. This is also true in spiritual life.”⁴⁵ Like other Unificationists, Kim recognized the power and progress of science, but turning to spiritual development, she disregarded the concept of science for the next five chapters. The reader next encountered science only in passing as the text provided a brief summary of the Enlightenment, deep within the chapter covering the two-thousand year history between Christ and the Second World War.⁴⁶

Kim’s other two mentions of science demonstrated ambivalence. On the one hand, science represented the evolution of human society and progress toward restoring what Kim and other Unificationists considered the perfect pre-Edenic state. In this regard, it harbingered the immanent arrival of a new age. But on the other hand, science offered nothing that religion could not. Kim’s chapter five, “The Consummation of Human History,” explicitly represented both positions: “[t]he progress of modern physical science has been the preparation for this ideal world. If there had been no fall of

man, mankind would have achieved modern advanced scientific civilization a long time ago along with a highly devoted spiritual life. It has been delayed because of the fall of man. Unless a spiritually new world is established, the modern science will only increase the uncertainty and fear in the minds of people. The Divine providence behind the progress of modern science is to prepare for the new age coming.”⁴⁷ However, in turning to the nature of the new age, Kim relegated science to the background. Science represented the ascendancy of the spiritual new world, but spirit proffered solutions and answers. Science offered only uncertainly.

The one section of the book that Young Oon Kim wholly wrote, rather than translated, included a single reference to science. The seventh paragraph of *Divine Principles*’ preface begins:

Today science has progressed to a high degree. People rarely accept anything without scientific test and logical proof, and religion cannot be excepted. A blind faith no longer has any attraction to or authority over the minds of modern men. They crave a new definition and expression of God, of His will, and of immortality in the terminology of twentieth century thoughts. We need a new revelation, which enables us to explain God and His providence in the language of this Atomic Age.⁴⁸

This view of science—that it had become the new epistemological foundation of Western society—reoccurred in subsequent translations of the Principle. It also contextualized Kim and her translation: they appealed to an audience that considered science important but not central, relevant but not defining. Such individuals accepted the need for rational thinking (rather than what they might call blind faith), but focused on religious questions rather than scientific ones, hence Kim’s explanation of God in the language of the Atomic Age. Kim’s *Divine Principles* therefore portrayed itself as compatible with

modern scientific thought, as the other American Unificationist sacred texts would, but focused its attention on matters of religion, leaving science in the background.⁴⁹

Science in Reverend Moon's Korean Unification Church

The Unification Church of the late 1950s and early 1960s hardly functioned as a centralized institution. Even as the American Unificationist movement generally ignored science, across the Pacific Reverend Moon invested a significant level of thought in the topic. Moon's sermons from this period often turned to questions of science and its relation to religion, revealing many of the underlying positions which would emerge in later Unification thought, especially the 1973 English translation of *Divine Principle* which would unite the American movement and become the movement's public written text and face to the world. As an ancillary, Moon insisted that the best religion and best science operated as internally unified pursuits, two individually coherent spheres each considering a different aspect of life and the world. In the sermons Moon vacillated between two approaches to religion. The first, that of religion and science as separate spheres, portrayed the two as mutually valid but distinct approaches to the world. In his second approach to religion and science, Moon saw the two as parallel pursuits that needed to unify in accordance with his grand millennial vision for the future of the Earth. Later, in their dealings with scientists Moon and his Unification movement would adopt the more moderate position that religion must guide science, but Reverend Moon's earlier work much more clearly indicates a desire to bring them together into a single unity. The urge to unify religion and science would also continue to persist in the movement's religious discourse.

The awesome scope of science at times served as a point of comparison. A June 2, 1957 sermon represented this rhetorical use of science. In a reference not lost on a Korean audience deeply aware of the nuclear attacks (albeit utilizing atomic fission devices) on Japan, Moon declared, “just as today we have discovered the greatest force in the material world through nuclear fusion, in the future we will discover the same kind of force in the spirit world.” Yet Moon integrated a judgment on the value of religion and science into the comparison, namely that religion’s claims on the supernatural existed outside the critiques of science. “That is a force that cannot be explained with the present level of natural science. This force is transcendent and is applicable in the supernatural world, but it is surely possible for this force to reach all things of the universe through human beings.”⁵⁰ Science cannot explain transcendental forces, Moon indicated, even though they possessed the power of “reaching all things.”

Moon returned to science in two other sermons that year, both of which featured extended discussions on science’s relation to religion and included implicit recognitions of religion and science as separate spheres. His September 29, 1957 sermon portrayed science and religion as simultaneously separate spheres, or paths, to use the sermon’s nomenclature, as well as mutually unsuccessful approaches to the world that needed to come together under Unificationism’s guidance. Basing his sermon on Psalm 23, which so famously declared that the Lord led the Psalmist on the paths of righteousness, “through the valley of the shadow of death” (RSV)⁵¹, Moon pushed each member of his church to find their own path. “Yet that path will come in many different forms. There will be paths that rely on religion; there will be paths that rely on science. In each field in which you find yourselves, politics, economics, philosophy, etc., there will be a different

path each of you walk.” Such words indicate a relativism if not outright equality between the paths. But Moon continued, “[w]hen you reflect upon whether you have found the eternal value that will allow you to embark upon a new path from the position you are in today, you will find that no one has yet found that kind of value and purpose. In other words, in religion, science, culture or any other field, we were not able to find the universal value that could establish our new ideology of life and form the power of new life. We were not able to set the one standard that can operate as the universal purpose itself.”⁵² Equal only in terms of their inability to usher in the millennial era, neither conventional science nor conventional religion offered ultimate solutions to the problems of individual lives or the world as a whole. Later in the same sermon, Moon lamented that “solving this fundamental problem of human beings can never be accomplished with religion, philosophy or science, either those of the past or of the present.” Strange words from the leader of a religious group, even a new religion! Moon clarified the matter somewhat in explaining why science failed to solve the problems of the world. He also prescribed the solution: “[b]ecause science today cannot work for the sake of peace for humanity or bring happiness in place of the whole purpose, science must also forge a bond with the one purpose of the whole. If those relations are not formed, then this world cannot be united as one.”⁵³ The “one purpose of the whole” would have keyed Moon’s audience that he referred to none other than the Divine Principle, the need to unify the world’s religions as well as sciences.

Moon reiterated the same position several months later in an October 6, 1957 sermon, “Let Us Establish the Glorious Original Homeland.” In this sermon, the Unification leader clearly indicated the validity of science, but demarcated it as studying

merely the external world. Nevertheless, he invoked the concept of stewardship, that humans have developed science in accordance with a divine mandate to study and understand the natural world. Like Kim and her *Divine Principles*, Moon recognized the progress of science, but he ascribed a sacred value to it that his American missionary did not:

Because God gave people the responsibility to bring the comprehensive ideology of unification to pass, they have been developing the natural sciences, which research nature, into the form of one unified science. Through religion, they have been bringing together the world of the mind. The development of science today, in other words, the modern civilization centering on science, has been fulfilling the unified external ideology. This has reached the sphere of a unified ideology on the level of the world. After that, in the internal dimension, you must complete the mission of building the internal world in which humanity can become one through the religion which reveals, the mind or the original nature and character of human beings.⁵⁴

Moon envisioned science and religion as two separate spheres, each of which focused the human intellect on a different area of research, or as he declared in a sermon later that winter, “religion represents the field of metaphysical truth and the natural sciences represent the field of physical truth.”⁵⁵ The October sermon reveals why the movement would later develop its efforts to bring the sciences together through the International Conferences on the Unity of the Sciences, just as it sought to unite the religious world. At its best, science existed as a single, unified sphere that studied the external world. As he would later show in his founders addresses at the conferences, the fragmentation of science concerned Moon.⁵⁶ Fragmentation complicated the boundaries and borders of science, making it less of a sphere and more of an amoeba, unsure of its center or boundaries. In contrast, within Moon’s religious worldview, science served its divinely mandated function when it holistically considered the material world. Only when science

existed as a single sphere could it clearly and neatly distinguish itself from religion, which considered the internal or immaterial truths of the cosmos.

Like the earlier talk, Moon's October sermon simultaneously stressed the need to unify the two spheres. "Although religion and science divided in the second half of the sixteenth century, in the last days today, we are crossing over to the state of union when we can again reach the one purpose."⁵⁷ The reference to the "last days" provides a crucial clue to understanding how Moon and Unificationism could concurrently uphold a belief in science and religion as separate spheres as well as hope to unify them. Moon based his October 6 sermon on 1 Thessalonians 5:1-11, an eschatologically-oriented New Testament section that declares "the day of the Lord will come like a thief in the night." (RSV) The Unification Church's millennial outlook best explains its and Moon's perspective on science and religion. In the normal world and in normal time, science and religion existed as separate spheres. But in the coming millennial age, the two would come together in service of a divinely-mandated new world, a heaven-on-earth. The sermon even included a messianic hint, the claim that "we can see that not only in the field of the natural sciences today, but also in the religious field, we have come to the point where we cannot move forward any more ... we find that there must appear someone new who can remove obstructions and take responsibility for the people if they do not listen to the commands."⁵⁸

Like most living religious movements, simple theological categories such as postmillennial and premillennial fail to adequately distinguish Unificationism, which possessed characteristics of both. Premillennialism takes its name from the theological position that Christ's advent will mark the initiation of the one thousand year period

(millennium) of peace prophesied in the New Testament book of Revelation, to be followed by a cataclysmic battle with Satan and the permanent creation of the new heaven-on-earth. The Unificationism of the 1950s and 1960s (the church's millennial position shifted over time) stressed the key component of premillennialism, belief in the imminent arrival of a Christ-figure, in Unificationism's case identified as Moon himself. Like premillennialists, Unificationists looked to a millennial era of peace and prosperity to follow the new advent, but unlike traditional premillennialism did not limit it to a one thousand year period. Nor did Unificationism follow premillennialism in predicting a violent worldwide apocalypse (to use the common sense of the word), though it did warn that chaos and war might precede the millennium in some quarters.

Although theologically premillennial, Unification shared the general outlook of postmillennialists, a more optimistic brand of millennialism that claims the thousand year of peace is to proceed the arrival of Christ. In the words of historian Paul Boyer, who chronicled the American millennialist tradition, postmillennialists "anticipated the gradual diffusion of Christianity until the Millennium almost imperceptibly became a reality."⁵⁹ Postmillennialism found its greatest expression in the turn of the twentieth century Social Gospel movement, which looked to social reform as the foundation of Christian religion and the Kingdom of Heaven on Earth. Rather than wait for the advent of Christ, humans must reform society themselves, explained Social Gospellers such as Walter Rauschenbusch, who bluntly declared that "[o]ne of the more persistent mistakes of Christian men has been to postpone social regeneration to a future era to be inaugurated by the return of Christ."⁶⁰ Unificationism, like the Social Gospel and wider postmillennialism, saw value in human work and the need to create model social

institutions on Earth. However, they did so not in the hopes of preparing for the return of Christ, but because the millennial era, or the New Age in Young Oon Kim's language, had already dawned. Like postmillennialists, Unificationists looked to human activities as necessary and beneficial, but they performed them during the era of the Second Advent itself. Rather than premillennial or postmillennial, Unificationism was merely millennial.

In addition to the theological concepts of postmillennialism and premillennialism, the more phenomenological categories of catastrophic and progressive millennialism, as devised by scholar of new religions Catherine Wessinger, help explain the Unificationist view of science. Wessinger writes:

Catastrophic millennialism involved a pessimistic view of humanity and society. We are so corrupt and sinful that the world as we know it must be destroyed and then created anew. This will be accomplished by God (or by superhuman agents such as extraterrestrials), perhaps with the assistance of human beings. The millennial kingdom will be created only after the violent destruction of the old world. Progressive millennialism involved an optimistic view of human nature that became prevalent in the nineteenth century. Humans engaging in social work in harmony with the divine will can effect changes that non-catastrophically and progressively create the millennial kingdom.⁶¹

Unificationism lacked the essential characteristics of catastrophic millennialism. Though Moon did warn of an impending confrontation between good and evil, in the guises of democracy and communism, famously declaring that "the time bomb is ticking," the movement encouraged its members and outsiders to work towards establishing an ideal world.⁶² Theologically speaking, the dawning of the second advent freed human beings of their sinful natures, as optimistic a view of human nature as one can expect from a Christian-oriented group that accepted the reality of original sin. As Moon declared in his October 6, 1957 sermon, "Only when the ideology of unification is established on this

earth and its tasks are brought to pass can Jesus complete his mission.”⁶³ Unificationists dedicated themselves to bringing the world’s religions and cultures together, creating world peace, and ending human suffering such as hunger, poverty, and disease.

The hallmark of progressive millennialism, human contributions to the creation of the Kingdom of Heaven, or Heaven on Earth, defined the Unificationist view of science. Later Unificationist thought would explicate the place of science in the pursuit of the millennium, but Moon’s early sermons only hinted at it, often conflating scientific progress with spiritual progress without explanation. He declared in a January 12, 1958 sermon, “[n]ow that the Last Days have come, everything will come to a conclusion. Philosophy will come to a conclusion, science will come to a conclusion, and the world economic system based on material will also come to a culmination point. At one point in the future, due to infinite progress in science, scientific research will invent improved food. Furthermore, you who are living in the last concluding era today must repent about your faith until now and try your best to live according to the words Jesus gave us.”⁶⁴ The sermon does not clearly indicate the possible relevance of the invention of improved food to the need to repent and live according to the gospel, but the juxtaposition of these two statements, along with similar ones in other sermons, shows that Moon considered science as a parallel to religion. Scientific progress mimicked religious progress. Or, as Moon declared in the October, 1957 sermon, “you must keep pace with the twentieth century scientific civilization that is making tremendous leaps and also nurture your internal character, you must set the new reformative standard in the internal aspects.”⁶⁵

Moon did clearly explicate the place of science in the coming millennial era, namely in alliance, sometimes union, with religion. Alone, science could not solve the

problems of the world. “In other words,” Moon explained in a March 30, 1958 sermon, “there will come a time when one cannot stand firm only with a horizontal [i.e., not Heavenly] world ideology. No matter how much one boasts of the scientific civilization of today, it cannot cause the happiness of humankind.”⁶⁶ Science lacked the guidance and value-orientation of religion, and therefore floundered. It also studied an incomplete universe, since it focused on purely the material world. Several months later, Moon offered that “science has been trying to explain this world of relationships through experiments. Philosophy has tried to explain it through logic. History has tried to explain it through facts. ... [R]eligion has sought to discover the motivation and purpose of the Absolute Being.”⁶⁷ But the merger of religion and science, enacted under the guidance of the Unification movement, offered a solution. “Consequently, no matter what you do now, you cannot produce the works of harmony which can link with the laws of the heavenly principle. ... We must establish the new religious ideology that can forge relations with the universe.”⁶⁸ Just a few years later, the “new religious ideology,” as Moon called it, took root in the United States.

Religion and Science in David S. C. Kim’s American Unificationist Movement

While Sun Myung Moon lectured in Korea and Young Oon Kim worked to translate and edit *Divine Principles*, spreading Unificationism among a Christian occult audience in Oregon and later the San Francisco Bay Area, David S.C. Kim (again, of no relation to Young Oon Kim) and Sang Ik Choi also arrived on American shores. Of the two, Mr. David Sang Chul Kim (1914-) appeared in America first, in September, 1959, landing just a hundred miles to the north of his compatriot Miss Kim, in Portland,

Oregon.⁶⁹ Distance and time commitments—both Kims officially entered America on student visas, though both treated their educational duties with much less earnest than their religious ones—prevented frequent interactions of the two Unificationist missionaries, although they twice managed to gather their groups for joint meetings, in June and September 1960. The departure of Miss Kim for San Francisco later that year left David S.C. Kim as the sole regional authority, free to develop his own style of proselytizing. Mr. Kim also traveled extensively, and before long he had spread his “Northwest Family” movement, as he called it, as far east as Chicago, as south as Salt Lake City, and with outposts throughout the northwest and mountain states.⁷⁰ Like Miss Kim, David S.C. Kim arrived with his own notes and translations of the Principle, the Unificationist sacred text, which he subsequently printed in 1964 under the title *Individual Preparation for His Coming Kingdom*, revised and printed again two years later.

David S.C. Kim’s *Individual Preparation for His Coming Kingdom*, abbreviated here as *Individual Preparation*, followed the same basic theology as *Divine Principles* and the Korea material that its translator had processed. Its very name suggests the Christian orientation of Kim’s group. As compared to Young Oon Kim’s movement, much less information exists on David S.C. Kim’s Northwest Family group. Yet the available evidence indicates that it appealed to a more conventionally Christian audience than did Miss Kim. As a student at the evangelical Western Conservative Baptist Seminary, David S.C. Kim met fellow Christians who defined themselves as orthodox believers.⁷¹ Rather than the nebulous “divine principle(s),” a term that most religionists might find applicable to their own faith, Kim used more Christian phraseology in the title

that implied an explicitly eschatological position, i.e., “His Coming Kingdom.” Like *Divine Principles* and the Korean language texts, *Individual Preparation* began with the Bible and developed an argument predicated on scriptural proof-texts. It explained that humanity fell because of the sexual sins of Satan, Eve, and Adam, and that Christ originally had intended to marry, sire perfect children, and restore the Edenic paradise on Earth. The crucifixion resulted in a failure of that mission, necessitating a second advent that would effect the material nature of salvation, just as Christ’s first advent had the spiritual nature. *Individual Preparation* implied but did not state that Moon is the second Christ figure, the Lord of the Second Advent, in Unificationist terminology. Thus far, the text agrees with Miss Kim’s *Divine Principles*. The difference lies in the presentation of the material. Whereas *Divine Principles* assumed a readership interested in the works of the spirit and the occult, *Individual Preparation* appealed to a more mainstream Christian audience, one that wanted to contextualize with their worldview the modern world—and therefore science—rather than Swedenborg.

Science clearly concerned Kim, given its prevalence in *Individual Preparation*. Of the over forty discrete references to science or scientists, the preface, written entirely by David S.C. Kim, contained about half of them. Compared to the paucity of Miss Kim’s treatment of science, where it appeared only once in the preface, Mr. Kim’s attention suggests a much wider interest in the subject. His text mirrored both the ambivalence of Young Oon Kim and two-fold approach of Sun Myung Moon, i.e. science and religion as separate spheres, yet simultaneously candidates for millennial merger. David S.C. Kim’s preface, however, gave much shorter shrift to the ideal of religion and science as mutually independent and viable separate spheres. As befitting a man

attending a conservative theological school and appealing to Christians in that context, he stressed the value of religion over and against science. “Generally speaking,” wrote Kim, “the author wishes to point out that, although we are living in the greatest scientific age of all time, the age of space travel, even hoping to achieve a landing on the moon (whether or not this will prove to be of value) all mankind is in a terribly confused emotional state. We are groping for some solutions to fundamental questions like why must we have war in Vietnam and ‘Where is God?’”⁷² The parenthetical remark that the moon landing may or may not prove valuable demonstrates the ambivalence of the author. While he admitted that science possessed awesome powers, he also insisted that “value” and values remained the precinct of religion. Here the two Kims and Moon all agreed: science needed religion in order to function as a moral and useful human endeavor. Or, as Kim bluntly explained in chapter seven of *Individual Preparation*, “[s]cientific advancement without God brings man fear and devastation.”⁷³

Kim’s text strictly limited the value of science, since science focused on the merely material, in distinction to religion’s attention to the spiritual causes of life’s problems. That is, science might solve some quandaries, but without religion guiding it, ultimate good remained outside its reach. Kim’s preface declared that “the problems of the United States and the world are not to excel in science and atomic energy, but are ideological, religious and philosophical. Until the absolute truth comes from the Absolute Truth or Universal Intelligence, not from the finite human brain of men through their reasoning and so-called scientific methodology, the roots of human sorrow and problems cannot be properly diagnosed for complete treatment and cure.”⁷⁴ This phrasing both denigrated science as rooted in finitude and a “so-called” methodology, but

it also held out hope that the Absolute Truth of religion could join with science to solve the problems of human sorrows. This perspective, that religion must guide science in order to resolve the problems of human society, would impel the Unification Church a decade later to sponsor the International Conferences on the Unity of the Sciences.

Like other commentators in the mid 1960s, Kim's *Individual Preparation* directly commented on the government-run scientific establishment in the United States, the "temple of science."⁷⁵ Unsurprisingly, Kim showed decided ambivalence. Projecting his own position onto an unnamed and unnumbered "segment" of the American public, Kim declared that "[i]n the United States, some segment of public opinion strongly feels that instead of spending such an astronomical amount of money on research in the science of space travel and aeronautics, a good percentage of those dollars could be put to better use in research on human dynamics, human relationships, education and other behavioral sciences in order to improve communication through better understanding of our fellow man. This would be far more effective in bringing about a lasting peace on earth. Before we attempt to conquer space and the universe, doesn't it make more sense to concentrate first on the research necessary to understand the individual human being?"⁷⁶

Remarkably, this section does not single out religion as an alternative to the temple of science, but rather called into question the centrality of the physical sciences in the federal scientific establishment. Social and behavioral sciences deserved as much attention as the physical sciences, declared Kim.

In addition to offering guidance on scientific research priorities, Kim's *Individual Preparation* turned to divinely-oriented millennial solutions. After all, the book urged "individual preparation for his coming kingdom." This position evidenced itself in the

body of the text, rather than the preface. For example, the penultimate section of the book declared that “[i]n order to solve the fundamental spiritual and material problems which resulted from the tragic fall of man, civilization with religion and science must culminate in one United Civilization, the beginning of God’s Ideal World and the consummation of human history. Religion and science exist, from God’s point of view, in order to educate and enlighten people so as to prepare them for the United Civilization.”⁷⁷ Mr. Kim’s United Civilization echoed Miss Kim’s New Age and Moon’s millennial vision of science and religion uniting in the Last Days. In all three Unificationist images of the future, science and religion would together usher in a new era of peace, prosperity, and godly society.⁷⁸ Nevertheless, David S.C. Kim did accept the separate spheres approach that Reverend Moon himself so obviously valued. One cannot argue, Kim admitted, with “the fact that religion and science are not really contradicting each other, but are actually complementing each other.”⁷⁹ Why? Both existed in order to help humanity recover from the Fall and reorient itself toward God. Again, such a vision of science rooted itself in the millennialism of a United Civilization, New Age, or coming Last Days. “Modern advancement of science is the manifestation of God’s Providence to bring about the Ideal World that He planned for all mankind in the beginning.”⁸⁰

Like Miss Kim and Reverend Moon, David S.C. Kim insisted upon religion’s, and particularly Unificationism’s, underlying compatibility with modern science. The best example of his desire to demonstrate the harmony of science and religion fell in the second chapter of *Individual Preparation*, which described the genesis of the universe, world, and humanity. As even the most precursory examination of American religious

history shows, the relationship between religion and science often fractures when the topic of human origins, Genesis, and the evolution of the species emerges.⁸¹ Kim labored to keep the two spheres together. “It is obvious by the science of Geology,” Kim explained, “that the Creation took a long period of time. When we study man and animals and all plant life, also the earth itself, we see that His process of creation is established upon definite laws, harmony, order and principles.”⁸² With this harmonious frame, Kim turned to the actual Genesis description of the creation of the world and its inhabitants. After describing the Biblical narrative, Kim provided a chart, “Process of Creation According to Science,” to correlate the religion and scientific views.

1.	Heaven on Earth Light – succession of day and night	Cosmic Era Azoic Era
2.	Firmament – sky – no scientific proof	
3.	Earth Plant Life	Archeozoic Era Proterozoic Era
4.	Luminaries – no record	
5.	Moving creatures, flying creatures, sea monsters, animal life	Paleozoic Era
6.	Cattle, creepers, beast and man	Cenozoic Era
7.	Sabbath Rest	Psychozoic Era

Kim’s text, however, did not explain this chart, merely presented it as evidence of the harmony between science and religion. Readers unfamiliar with paleontology or geology might have searched in vain for references to the “cosmic era” and “psychozoic era,” the former of which does not appear in any standard reference, and the latter being a non-standard reference to the geological era of humanity proposed by Russian geologist Vladimir Vernadsky.⁸³ Regardless, Kim succeeded in his attempt to show religion and science as two orderly columns in a single chart, each describing the same reality with different terminology. Nevertheless, the average reader certainly better comprehended the meaning of “cattle, creepers, beast and man” than the tongue-twisting jargon

“cenozoic era.” Reducing science to unexplained technical terms rhetorically limited its appeal.

Religion and Science in Sang Ik Choi’s American Unificationist Movement

Alongside David S.C. Kim and Young Oon Kim, Sang Ik Choi (1936-) led the other major competing Unification group, sometimes called the “Japanese Family” since the Korean Choi had founded the Japanese branch of Unificationism and brought several Japanese converts with him to the United States. Planting himself in San Francisco, just across the Bay Bridge from Young Oon Kim’s Oakland Unification group, Choi appealed to a very different audience, and one that would come to dominate the Unification movement. Choi arrived in San Francisco in 1965, and brought the Unification gospel to students and youth, targeting the utopian and socially-engaged young people who defined the counterculture.⁸⁴ Choi limited the “God-talk” in his movement, hoping to bring a more secularly-minded group into the Unification movement. Although certainly not atheistic—Choi did not differ from the standard Unification theology—he presented it in a very different manner, emphasizing the pragmatic solutions that Unification promised, and the utopian rather than millennial hopes of the movement. Unsurprisingly, Choi leaned on science to a much greater degree than either of the Kims. The same themes appear in his work, however, namely a recognition of the lofty place of science in the modern world and a desire, very strong in Choi’s case, to portray Unificationism as compatible with it.

Choi, like Moon, embodied the cross-cultural nature of Unificationism’s approach to science and religion. A Korean who came of age during the peninsula’s civil war, he

had converted to Moon's Unificationism and then led the movement's first mission to Japan. There he introduced the Korean religious group to a Japanese audience that had very little background or interest in Christianity. Successful at translating Unificationism into the Japanese context, Choi arrived in America having filtered Unificationism through his Japanese experience. This provided an advantage when he encountered Americans who despite their different cultural assumptions, shared with the Japanese an unfamiliarity with the Christian and Korean background of the Unification Church.

Choi had arrived in the heart of the American counterculture, San Francisco of the late 1960s and early 1970s. His 1965 arrival and 1969 publication of his main written text, *Principles of Education*, straddled the summer of love itself, 1967. Choi's movement synergized the background of the Japanese Unificationist with the American counterculturalists: both felt outside the American mainstream, and neither generally possessed strong Christian backgrounds. Michael Mickler explained that in Choi's group "there was no church visitation or serious theological focus as in Miss Kim's group. This was due partly to the fact that most of the members were non-Christian converts and partly to the pattern of church life developed in Japan, where there were few Christian churches. The emphasis, rather, was on action. Members witnessed actively on the streets, in parks, and on campuses."⁸⁵ Mickler also provided an excerpt from an interview with Choi that revealed the missionary's desire to bring Unificationism to a countercultural audience: "After I came to America I was surprised that ... especially young people in San Francisco were not very much interested in religion ... and then people who are interested in religion do not want to change anything. ... Then, at the same time, the hippie movement started. When I saw the hippie people I [felt] really

hurt. Young men with long hair without any discipline or training, character education. They want to live whatever they want; they have license; they want an easy life. So I thought I better contribute my life to the character education of life rather than religious life. Then this way I can help American society and this way I can be successful rather than by a religious approach.”⁸⁶

Although roughly based on the Korean text of the Divine Principle, Choi’s *Principles of Education*, itself comprised of a series of six pamphlets that later became a book, stressed the scientific or logical nature of its argument rather than assuming an occultist, spiritualist, or specifically Christian readership. Choi’s text did not so much deemphasize the religious aspect of Unificationism, which still remained the center, as focus on the pragmatic aspects of it, building a religious structure upon a rationalist foundation. In his own words, again in an interview with Mickler, “I used the Divine Principle, which is a very religious approach. But I digested the Divine Principle. Based on the Divine Principle, I put my philosophical ideas and a little bit of oriental religion together and I a little bit changed the Divine Principle.”⁸⁷

If David S.C. Kim’s *Individual Preparation* erred on the side of religion and slighted science, Choi’s *Principles of Education* treated science with reverence and chided religion for its irrationality in the face of modern science. The separate spheres approach fell between the lines of the text, and the general outlook on the relation of science and religion seemed negative. For example, Choi’s assessment in the “Purpose of Mankind” volume recognized the negative assumptions about conventional religion that percolated through the counterculture: “the further and more intensely science and philosophy seek the truth, the more contradiction arises between their theories. Scientists

and philosophers restlessly wonder about the truth about man, and today skepticism and agnosticism are becoming popular.”⁸⁸ Religion, Choi complained, failed to live up to the rational expectation of modern culture. Yet the Unificationist missionary had plenty to say about science as well: value-neutral science lacked the ability to discern Truth, making it merely a collection of facts. Here the classic Unification view of science emerges, that science needed the guidance of the Unification Church in order to find its bearings. The best science and the best religion functioned in parallel as dual exponents and proponents of truth. Ironically, Choi envisioned religion as rational and objective, and science as value-oriented.

Choi and the members of his Unificationist movement found flaws in conventional religion for two reasons. First, religion failed the test of practicality: it didn’t make people happy. Religion had become merely a weekend diversion for busy Americans, Choi complained, a mere part of their life that appealed to the spirit but not the mind or body. “Man,” Choi wrote (exclusive language apparently was not a problem he felt called to solve!), “exists in the dual purpose of spirit and body. Therefore, man cannot be happy unless he fulfills the dual demand and purpose. To emphasize only one side of this dual purpose as religions, philosophies and science have done, is partial. Thereby these viewpoints cannot bring real happiness but only conflict and frustration.”⁸⁹ Religion and science both failed the pragmatic test because they could not bring happiness to human beings, who innately needed holistic solutions to their problems, not bifurcated projects appealing to spirit one day and body the next. Here Choi reflected a wider countercultural critique of American life, with its nine-to-five workaday jobs, dinner parties Friday night, and Sundays spent at the Church of one’s choice.

(Ecumenical commentators permitted that Jewish Americans might have other weekend plans.)

Two years after Choi began publishing *Principles of Education* as a booklet series, another former Bay Area denizen, Dr. Richard Alpert, started the run of a series of pamphlets titled *Be Here Now*, published under his religious name, Baba Ram Dass. Ram Dass captured a similar sentiment to Choi's, that neither conventional religion nor science brought Americans happiness. "I felt something was wrong in my world, but I couldn't label it in any way so as to get hold of it. I felt that the theories I was teaching in psychology didn't make it, that the psychologists didn't really have a grasp of the human condition, and that the theories I was teaching, which were theories of achievement and anxiety and defense mechanisms and so on, weren't getting on to the crux of the matter."⁹⁰ Choi, like Ram Dass, implored his readers to search for a better solution, ones that combined the approaches of religion and science.

Second, religion clung to antiquated standards rather than embracing the new ideals of the modern world. Choi singled out the need for rationality as the prime requisite for religion to succeed in the modern world. The "Theory of the Ideal Man" volume of *Principles of Education* explained that "[r]eligions and philosophies should be the means for educating true men. Yet they lack the systemic logic and reason needed for acceptance by today's well-educated conscientious people."⁹¹ The author did not provide specific instances wherein religion lacked logic, indicating that he assumed his readership was, quite literally, on the same page. Again, this view echoed a common countercultural critique of religion, its irrational, an assessment of religion especially popular among secularist or Marxist inspired counterculturalists.

However, Choi represented a religious group, albeit one with sometimes-secular aims. Ultimately he did not disparage religion, but the other religions of America against which the Unification Church competed. Like Young Oon Kim and David S.C. Kim, Choi insisted on an ultimate compatibility between science and religion, particularly the religion of his own movement. The section of the *Principles of Education*, “Theory of the Origin of Crimes,” exposes Choi’s underlying respect for religion, albeit alongside a rejection of competing forms of religion. The title itself, “Theory of the Origin of Crimes,” revealed Choi’s approach. Although the pamphlet possessed a title reminiscent of a sociology textbook, it actually focused upon the Fall of humanity and the introduction of sin and evil. But it very slowly built towards that theme, beginning with a critique, not of religion itself, but of the practitioners of religion. “Some religionists foolishly emphasize that truth is not logical or rational. That means it is illogical or irrational. Religionists do this in order to cover poor interpretation of scripture.”⁹² Flaws existed not within scripture itself, but in its interpreters. A few pages later, Choi turned to the main thrust of his argument—that the fall of man accounted for criminal activity—an implication that entailed a religious solution to the problem of crime. Choi explained: “[a]mong the many religious and philosophical writings only the Bible precisely describes the origin of the sin of mankind in the story of Paradise Lost [i.e. Genesis 3]. However, if taken literally, the Biblical presentation is illogical and unscientific. It is difficult to believe that sin originated when Adam and Eve, deceived by the serpent, ate fruits of the tree of knowledge and from this act original sin has been passed on to all men.” What is unscientific about the account, asked Choi. “[I]f someone

ate a spoiled apple, he might suffer a severe stomach ache. However, his children would not be necessarily susceptible to a stomach ache because of his actions.”⁹³

Taking the Genesis account at face value, Choi ridiculed a literal interpretation of the scripture. How could a snake talk, a fruit contain the root of sin, or a just God punish individuals for consuming enticing produce? Rejecting such readings, *Principles of Education* explained that “through employing our utmost efforts of scientific induction, we can reach the ultimate cause of crimes.”⁹⁴ The solution, of course, lay in Unification’s symbolic reading of the Fall, that Satan seduced Eve in an act of spiritual fornication, who passed the sin on to Adam through physical sex, thereby contaminating the human gene pool. Genesis reflected this account in symbolic language, not meant to be taken literally. Within this account, which agrees with other Unificationist materials in terms of basic theology, one finds Choi’s own position: traditional religions adopted irrational and unscientific readings, but his own Unificationist approach offered a scientific and rational approach to solving the pragmatic problems of the world.

For Choi, the best religion, Unificationism, operated according to rational and scientific principles. On the one hand, such a reality was eternal, based on the rationality of God and therefore the logic of creation. “What is the true value of man?” asked *Principles of Education*. “We see the best way to find the answer is to observe the Originator’s cosmic law. This is the law of the conscience, rational mind and instinct which governs man and in which the deviated propensity is excluded.”⁹⁵ On the other hand, the development of modern, technical, scientific society called for the special need of rational, scientifically-guided religions. In language reminiscent of Young Oon Kim’s *Divine Principles*, Choi’s “Theory of Universal Value” volume explained that “today’s

scientific age does not accept anything but reasonable truth. The age of falsity and mystery has gone. The time has come for all religionists to be awakened to the providence of the new age.”⁹⁶ The text does not provide examples of what a scientific religion might look like, but Choi’s own movement does. Calling it the “Re-Education Foundation,” Choi and his group of Unificationists eschewed formal worship, liturgy, or ritual, and focused on study (seminars, lectures, conversations) and the creation of outreach opportunities. Of the latter type of work, the Re-Education Foundation sponsored intercultural and interreligious events, planned the creation of its own university, and began construction of a utopian “ideal city,” which later morphed into a Unificationist retreat location.⁹⁷

Choi and his Re-Education Unificationists did offer a critique of science as well, one that foreshadowed the later Unification Church-sponsored ICUS conferences. Science and religion each offered truth, but each focused on a different region of knowledge. “The purpose of religion is to teach the truth that pervades the individual character, the family, the society and the world culture and civilization and to give direction towards the goal of salvation,” explained *Principles of Education*.⁹⁸ “Definite truth,” however, required the combination of religious study with the material study of the universe. “The original purpose of science is to establish such definite truth. The collection of material facts or mere observations of data is never worthy of being called scientific unless what is truth and what is untruth is clarified authentically. Nevertheless, today’s science is blind to the normal and the abnormal.”⁹⁹ That final statement, linked to Choi’s definition of science, revealed his critique of science: its value-neutrality. “Modern science attaches too much importance to objective study. Scientists produce a

critical defect in science when they say that it cannot and should not have value structure. The insist that the view of value should be avoided in the search for truth. However, it is futile to attempt to reach the truth unless the definite value structure is utilized, because the way a phenomenon is now is not always the true status of the phenomenon.”¹⁰⁰

Values would save science, and Choi’s *Principles of Education*, alongside the Unificationist movement more widely, offered those values. Again, Choi ultimately did not differ from the two Kims or Moon in looking to religion, and Unification specifically, as a guide for science.

Although *Principles of Education* functioned as the sacred text of the Choi-led San Francisco Unificationists, the group produced other printed materials for its street preaching and pamphleteering. One leaflet that the group produced, entitled “Does God Exist? Is God Alive or Dead?,” provided a good example of how the movement sought to portray its relation to science and religion. Printed in San Francisco in 1969, the group disseminated the pamphlet during the peak of the Haight-Ashbury counterculture. It hooked readers with what potential converts might read as a capitulation to science: “[h]istorically, the development of science, and not the evolution of religious beliefs, has successfully solved many of the mysteries and riddles of the universe. During the same period of rapid scientific advancement many scientists and atheists pushed God out of their minds and universe,” since science had come to explain things that religion did previously. This abrogated the need for belief in a deity.¹⁰¹ But the pamphlet rejected this position on two grounds. First, it claimed, “one is able to detect many defects and errors in this system of logic advanced by these scientists and atheists,” although it did not explicate these flaws.¹⁰² Rather, the pamphlet noted that science cannot explain

through natural laws alone the complexity of the cosmos and the inherent order in nature, effectively restating the classical teleological proof of God's existence, i.e. only the existence of a deity can explain the order of the cosmos. Here Choi's Unificationism treaded upon well worn ground. Thomas Aquinas proposed such an approach, and the eighteenth century theologian William Paley made famous the argument using the metaphorical argument that the complexity of a watch implied the presence of a watchmaker. As additional evidence, the pamphlet explained that contemporary scientists had returned to religious belief for this reason, citing the physicist savant Albert Einstein and Big Bang cosmologist George Gamow as examples. Even scientists realized that while it could solve "many" mysteries and riddles, science did not offer all the solutions.

But then again, the "Does God Exist?" pamphlet explained, neither did religion: "[s]imilarly, in the religious world theologians have until now been unable to clearly explain the existence of God. ... They say that people will have to 'just believe' the existence of God on the basis of incomplete information and understanding, and superficial experience."¹⁰³ Such leaps of faith, the Unificationist pamphlet reminded readers, failed to convince inhabitants of the modern world. "[P]eople today must clearly understand before they [can] have solid faith and conviction."¹⁰⁴ Here the leaflet repeated almost verbatim the movement's *Principles of Education*. With neither religion nor science available as viable options, the Re-Education Foundation Unificationists presented themselves as the best option for the seeker after truth. Only the movement's own ideology, which the pamphlet called the Unification Principle, provided clear, logical answers to the basic ontological questions of why the universe is here, and why do

human beings exist. The pamphlet assured potential converts that clear answers awaited those who attended the church's free lectures and meetings. "The time has now arrived," the pamphlet declared, "when man's belief in a mysterious God gives way to a belief in a scientific God. We may now know the secret principles underlying the teachings of the Son of God, religious leaders and saints."¹⁰⁵ Or, as the Reverend Moon declared six years later to a group of Unificationist students, "the age in which God had to use coded messages or symbolic terms has passed. Now we are in the age where we can directly hear from Him through someone, and that is exactly what's happening in our group."¹⁰⁶

The pamphlet revealed the three fundamental Unificationist assumptions that would persist after the competing Unificationist factions coalesced into the American Unification Church into the early 1970s, positions which also existed inchoate in the other Unification missionaries' thought. First, science offered the potential of human progress and must be recognized as a positive force. The Unification movement put this position into practice by funding the International Conferences on the Unity of the Sciences (ICUS), which moved beyond mere recognition to the encouragement and guidance of science by religion. Ancillary to this position, Unificationism tremendously valued the opinions of scientists and science itself and sought to portray science as supporting its own position, as evidenced by the references to Einstein and Gamow in the Choi group's pamphlet. Second, religion needed to be scientific, i.e. it must appeal to rationality and proof rather than insist on faith. The Re-Education Unificationists and later the wider Unification Church prided itself on being a modern scientific religion that appealed to intellect rather than faith. Finally, the pamphlet revealed that its Unificationist authors ultimately valued religion, specifically their own religion, over

science. It ended by summarizing the “Unification Principle,” which explained both the “cause of creation” as well as “how man [can] become perfect.”¹⁰⁷ Science offered value, but Unificationism offered even more.

¹ Moon's original name was Yong Myung Moon, which he changed in the 1950s.

² Bruce Cumings, "The Origins and Development of the Northeastern Asian Political Economy: Industrial Sectors, Product Cycles, and Political Consequences," *International Organization*, Winter 1984 1984, 14.

³ Bruce Cumings, *Korea's Place in the Sun: A Modern History* (New York: Norton, 1997), 170.

⁴ Ibid., 166. A more detailed economical analysis is Sang-Chul Suh, *Growth and Structural Changes in the Korean Economy, 1910-1940* (Cambridge: Council on East Asian Studies of Harvard University, 1978). See also the recent anthology Gi-Wook Shin and Michael Robinson, eds., *Colonial Modernity in Korea* (Cambridge: Harvard University Asia Center, 1999).

⁵ Adrian Buzo, *The Making of Modern Korea* (London: Routledge, 2002), 30.

⁶ Michael Breen, *Sun Myung Moon: The Early Years, 1920-53* (Hurtspierpoint, West Suffix: Refuge Books, 1997), 19.

⁷ Ibid., 29.

⁸ There are several differing accounts of this charge, varying both in terms of the specific date of the revelation as well as the content. Michael Breen's chronicle of Moon's young life indicates that it occurred on April 17, 1935. Others, such as the hagiographic *Path of a Pioneer*, place the revelation on "Easter morning, April 17, 1935"—an impossibility, since April 17 fell on a Wednesday. No doubt much of the confusion owes to the accepted fact that Moon did not share his experience until years later. See Ibid., 30-31, Jonathan Gullery, ed., *The Path of a Pioneer: The Early Days of Reverend Sun Myung Moon and the Unification Church* (New York: HSA Publications, 1986), xii.

⁹ Breen, *Sun Myung Moon: The Early Years, 1920-53*, 31.

¹⁰ Ibid., 41.

¹¹ Gullery, ed., *The Path of a Pioneer: The Early Days of Reverend Sun Myung Moon and the Unification Church*, xii-xiii.

¹² Breen, *Sun Myung Moon: The Early Years, 1920-53*, 36.

¹³ Eileen Barker, *The Making of a Moonie: Choice or Brainwashing?* (Oxford: Basil Blackwell Publishing Ltd, 1984), 39.

¹⁴ Breen, *Sun Myung Moon: The Early Years, 1920-53*, 73.

¹⁵ Ibid., 98-100.

¹⁶ Massimo Introvigne, *The Unification Church* (Salt Lake City: Signature Books, 2000), 10.

¹⁷ For an insider's detailed explanation of the texts' evolution, see Jin-choon Kim, "A Study of the Formation and History of the Unification Principle," *Journal of Unification Studies* 2 (1998).

¹⁸ Chung Hwan Kwak, *Outline of the Principle, Level 4* (New York: Holy Spirit Association for the Unification of World Christianity, 1980), 1.

¹⁹ I have omitted an organizational history of the early Unificationist movement. Those interested should consult Michael L. Mickler, *40 Years in America: An Intimate History of the Unification Movement, 1959-1999* (New York: HSA Publications, 2000), Michael L. Mickler, *A History of the Unification Church in America, 1959-1974: Emergence of a National Movement* (New York: Garland, 1993).

²⁰ Mickler, *40 Years in America: An Intimate History of the Unification Movement, 1959-1999*, 29. See also Mickler, *A History of the Unification Church in America*, 103.

²¹ Kim, "A Study of the Formation and History of the Unification Principle," 61, Mickler, *A History of the Unification Church in America*, 7.

²² Young Oon Kim titled her 1960 first edition translation, *The Divine Principles*. Starting in the 1969 fourth edition, she changed the title to *Divine Principle and Its Application*. Working from the Korean *Wolli Kangron*, Won Pok Choi produced the nearly identically titled *Divine Principle* in 1973, which subsequently became the standard and authoritative version, renamed *Exposition of the Divine Principle* in 1996.

²³ Kim, "A Study of the Formation and History of the Unification Principle," 61.

²⁴ Kim produced approximately five hundred copies of the 1st edition *Divine Principles*, none of which are available for individual use. However, the Unification Church has created a digital version of the text, available freely online. Note that the digital version lacks page numbers, therefore when citing the text I will provide both the URL and the relevant chapter number. Young Oon Kim, "The Divine Principles, by Young Oon Kim [First Edition, 1960]," <http://www.tparents.org/Library/Unification/Books/DP60/> (accessed 13 July 2006), chapter 2.

²⁵ Ibid.

²⁶ Ibid. chapter 4.

²⁷ Note the slight change in the title of the later edition, *Divine Principle*. Sun Myung Moon, *Divine Principle* (New York: The Holy Spirit Association for the Unification of World Christianity, 1973), 208.

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- ²⁸ Kim, "The Divine Principles, by Young Oon Kim [First Edition, 1960]," chapter 3.
- ²⁹ Ibid.
- ³⁰ Barker, *The Making of a Moonie*, 47.
- ³¹ Mickler, *A History of the Unification Church in America*, 8.
- ³² Ibid., 16.
- ³³ For full and very colorful descriptions of Kim's early converts, see John Lofland, *Doomsday Cult: A Study of Conversion, Proselytization, and Maintenance of Faith* (New York: Irvington Publishers, 1977), 36-40.
- ³⁴ Young Oon Kim, "Vision for the West," in *40 Years in America: An Intimate History of the Unification Movement, 1959-1999*, ed. Michael L. Mickler (New York: HSA Publications, 2000), xv-xvi.
- ³⁵ Mickler, *A History of the Unification Church in America*, 23.
- ³⁶ Robert S. Ellwood, *The Fifties Spiritual Marketplace: American Religion in a Decade of Conflict* (New Brunswick: Rutgers University Press, 1997), 20.
- ³⁷ Lofland, *Doomsday Cult: A Study of Conversion, Proselytization, and Maintenance of Faith*, 35.
- ³⁸ Many scholars have noted the impact of Swedenborgianism on later occult and metaphysical traditions, notable Marguerite Beck Block, *The New Church in the New World: A Study of Swedenborgianism in America* (New York: Henry Holt and Company, 1932), 57, Jon Butler, *Awash in a Sea of Faith: Christianizing the American People* (Cambridge: Harvard University Press, 1990), 234. For the impact of Swedenborgianism on Theosophy, see Bruce F. Campbell, *Ancient Wisdom Revived: A History of the Theosophical Movement* (Berkeley: University of California Press, 1980), Robert S. Ellwood, "The American Theosophical Synthesis," in *The Occult in America: New Historical Perspectives*, ed. Howard Kerr and Charles L. Crow (Urbana: University of Illinois Press, 1983). For Spiritualism, R. Laurence Moore, *In Search of White Crows: Spiritualism, Parapsychology, and American Culture* (New York: Oxford University Press, 1977), 7-10. And for Swedenborgianism's impact on American Buddhism, see Thomas A. Tweed, *The American Encounter with Buddhism: 1844-1912* (Chapel Hill: University of North Carolina Press, 1992), 59-60.
- ³⁹ J. Gordon Melton, "How New Is New? The Flowering of the "New" Religious Consciousness since 1965," in *The Future of New Religious Movements*, ed. David G. Bromley and Phillip E. Hammond (Macon, Georgia: Mercer University Press, 1987).
- ⁴⁰ Lofland, *Doomsday Cult: A Study of Conversion, Proselytization, and Maintenance of Faith*, 35, Mickler, *A History of the Unification Church in America*, 4.

⁴¹ Kim, “Vision for the West,” xvi.

⁴² Mickler, *A History of the Unification Church in America*, 11-12.

⁴³ Ibid., 23-25.

⁴⁴ Reprinted in Ibid., 24.

⁴⁵ Kim, “The Divine Principles, by Young Oon Kim [First Edition, 1960],” chapter 6.

⁴⁶ Ibid. chapter 11.

⁴⁷ Ibid. chapter 5.

⁴⁸ Ibid. preface.

⁴⁹ So little did science concern the early Unificationist community that when Kim revised her *Divine Principles* translation for its third edition, science assumed an even lower place. Rearranging the “Resurrection” chapter, she altogether removed the discussion of science, which previously had served an explanatory or comparative role. Likewise, the ambivalence the first edition showed science in the chapter, “The Consummation of Human History,” transformed into a vision of science as merely a useful tool. From the utopian declaration that “[t]he progress of modern physical science has been the preparation for this ideal world,” and the stark warning that “unless a spiritually new world is established, the modern science will only increase the uncertainty and fear in the minds of people,” (1st edition) the text now declared of the dawning new age, “[i]n this Golden Age, the highly advanced scientific achievement of the Occident will serve to make the external life of the New World convenient and pleasant. And the highly advanced religious and metaphysical achievement of the Orient will provide the philosophy of the New Age. Thus the New Age will see perfect harmony between the cultures of the East and West.” (3rd edition). Kim had shifted the focus from science itself to the unity of east and west, spiritual and material, with science a mere characteristic of the modern west. The Unificationism of Kim’s 1963 *Divine Principles* envisioned science as something “convenient and pleasant,” but hardly worth discussing in the sacred text. Young Oon Kim, *The Divine Principles* (San Francisco: Holy Spirit Association for the Unification of World Christianity, 1963), 82.

⁵⁰ Sun Myung Moon, “Let Us Become the Citizens Who Take Possession of the Kingdom of Heaven (2 June, 1957),” in *Sermons of the Reverend Sun Myung Moon, vol. 2* (New York: Holy Spirit Association for the Unification of World Christianity, 1994), 188.

⁵¹ Young Oon Kim’s *Divine Principles* and some other early sources use the public-domain American Standard Version, but the Unification Church’s own publications generally utilize the Revised Standard Version translation of the Holy Bible, which I have followed here.

⁵² Sun Myung Moon, “The Path, Its Purpose and Its Value (29 September, 1957),” in *Sermons of the Reverend Sun Myung Moon*, vol. 3 (New York: Holy Spirit Association for the Unification of World Christianity, 1995), 48-49.

⁵³ *Ibid.*, 54.

⁵⁴ Sun Myung Moon, “Let Us Establish the Glorious Original Homeland (6 October 1957),” in *Sermons of the Reverend Sun Myung Moon*, vol. 3 (New York: Holy Spirit Association for the Unification of World Christianity, 1995), 75.

⁵⁵ Sun Myung Moon, “Where Is the Refuge in Which Heaven Can Dwell? (12 January 1958),” in *Sermons of the Reverend Sun Myung Moon*, vol. 3 (New York: Holy Spirit Association for the Unification of World Christianity, 1995), 189.

⁵⁶ Moon reiterated his concerns about the fragmentation of science in most of his ICUS Founders Addresses. For example, his thirteenth ICUS address declared, “[o]ne of the greatest tragedies now facing the pursuit of knowledge is the fragmentation of the academic disciplines. Such divisive specialization of science and knowledge, like the dismantling of a machine, ultimately paralyzes the function of the whole and prevents science from fulfilling its mission.” International Conference on the Unity of the Sciences, *ICUS XIII Commemorative Volume, 1984* (New York: International Cultural Foundation, 1985), 12. On a more individualized note, Moon lamented in his speech to the sixth ICUS, “[e]xtreme specialization provides knowledge which may have little meaning for anyone other than the individual who pursues it. The joy of discovery should inspire a scholar to communicate his findings to others in terms they can understand.” International Conference on the Unity of the Sciences, *The Search for Absolute Values in a Changing World: Proceedings of the Sixth International Conference on the Unity of the Sciences, November 25-27, 1977, San Francisco* (New York: International Cultural Foundation Press, 1978), 10.

⁵⁷ Moon, “Let Us Establish the Glorious Original Homeland (6 October 1957),” 75.

⁵⁸ *Ibid.*, 76.

⁵⁹ Paul S. Boyer, *When Time Shall Be No More: Prophecy Belief in Modern American Culture* (Cambridge: Belknap Press of Harvard University Press, 1992), 67-8.

⁶⁰ Walter Rauschenbusch, *Christianity and the Social Crisis* (New York: Hodder, 1907), 345.

⁶¹ Catherine Lowman Wessinger, *How the Millennium Comes Violently: From Jonestown to Heaven’s Gate* (New York: Seven Bridges Press, 2000), 16-17.

⁶² Sun Myung Moon, “Our Position,” (Sermon, 2 January 1979, trans. Bo Hi Pak, 1979) Unification Church order# 79-01-02.

⁶³ Moon, “Let Us Establish the Glorious Original Homeland (6 October 1957),” 77.

⁶⁴ Moon, “Where Is the Refuge in Which Heaven Can Dwell? (12 January 1958),” 193.

⁶⁵ Moon, “Let Us Establish the Glorious Original Homeland (6 October 1957),” 76.

⁶⁶ Sun Myung Moon, “What Is God Going to Do with Exiled Humanity? (30 March, 1958),” in *Sermons of the Reverend Sun Myung Moon*, vol. 4 (New York: Holy Spirit Association for the Unification of World Christianity, 1995), 100.

⁶⁷ Sun Myung Moon, “Let Us Possess the Everlasting Love of the Father (5 October, 1958),” in *Sermons of the Reverend Sun Myung Moon*, vol. 4 (New York: Holy Spirit Association for the Unification of World Christianity, 1995), 218.

⁶⁸ Moon, “The Path, Its Purpose and Its Value (29 September, 1957),” 53.

⁶⁹ Mickler, *40 Years in America: An Intimate History of the Unification Movement, 1959-1999*, 22.

⁷⁰ *Ibid.*, 23.

⁷¹ See a general discussion of Kim’s group, see also *Ibid.*, 22-24. Vernon Pearson, an early member of David S.C. Kim’s United Chapel group, also alluded to the “fundamentalist” Christian makeup of the group in Vernon Pearson, “God’s Work in the Northwest,” in *40 Years in America: An Intimate History of the Unification Movement, 1959-1999*, ed. Michael L. Mickler (New York: HSA Publications, 2000), 57. Also, I am indebted to Dr. Michael Mickler, who discussed the demographics of the David S.C. Kim group with me. Personal Conversation, Michael Mickler with author, 23 August 2006, Barrytown, N.Y.

⁷² David Sang Chul Kim, *Individual Preparation for His Coming Kingdom* (Portland, Or.: United Chapel of Portland, 1968), ix.

⁷³ *Ibid.*, 88.

⁷⁴ *Ibid.*, x.

⁷⁵ Compare, for example, to Rachel Carson, *Silent Spring* (Boston: Houghton Mifflin, 1962), Jacques Ellul, *The Technological Society*, 1st American ed. (New York: Knopf, 1964).

⁷⁶ Kim, *Individual Preparation for His Coming Kingdom*, x.

⁷⁷ *Ibid.*, 179.

⁷⁸ Cf. Kim’s explanation in the chapter titled “Doctrine of the Last Days,” in which he wrote that during the Second Coming, “[w]e can see in the vast change of cultural and scientific fields a possibility for unity. The amazing development of modern science is

for the age of the Ideal World to come which God originally planned in the beginning.”
Ibid., 89.

⁷⁹ Ibid., ix-x.

⁸⁰ Ibid., vi.

⁸¹ For example, see Edward J. Larson, *Summer for the Gods: The Scopes Trial and America's Continuing Debate over Science and Religion* (New York: BasicBooks, 1997), Ronald L. Numbers, *Darwinism Comes to America* (Cambridge: Harvard University Press, 1998), Ronald L. Numbers, *The Creationists* (New York: A. A. Knopf, 1992).

⁸² Kim, *Individual Preparation for His Coming Kingdom*, 9.

⁸³ Vernadsky himself credits J. Le Conte (1823-1901) with the phrase. W. I. Vernadsky, “The Biosphere and the Noösphere,” *American Scientist* 33, no. 1 (1945): 7.

⁸⁴ See Mickler, *A History of the Unification Church in America*, 87-88.

⁸⁵ Ibid., 101.

⁸⁶ Ellipses in original. Ibid., 106.

⁸⁷ Ibid., 112.

⁸⁸ Sang Ik Choi, *Principles of Education: Purpose of Mankind* (San Francisco: Re-Education Center, 1969), 4.

⁸⁹ Sang Ik Choi, *Principles of Education: Theory of Happiness* (San Francisco: Re-Education Center, 1970), 2.

⁹⁰ Baba Ram Dass, *Be Here Now* (San Anselmo, Calif.: Hanuman Foundation, 1978), 2.

⁹¹ Sang Ik Choi, *Principles of Education: Theory of the Ideal Man* (San Francisco: Re-Education Center, 1969), 2.

⁹² Sang Ik Choi, *Principles of Education: Theory of the Origin of Crimes* (San Francisco: Re-Education Center, 1969), 2.

⁹³ Ironically, Choi has rejection as unscientific what was once a standard scientific view, Lamarckism, which explained that behaviors of the parents might influence the inheritance of the offspring. Darwin’s theory of natural selection eclipsed Lamarck’s version of evolution. Ibid., 4-5.

⁹⁴ Ibid., 5.

⁹⁵ Choi, *Principles of Education: Theory of the Ideal Man*, 7.

⁹⁶ Sang Ik Choi, *Principles of Education: Theory of Universal Value* (San Francisco: Re-Education Center, 1969), 35.

⁹⁷ For a detailed history of the Re-Education Foundation's activities, see Mickler, A *History of the Unification Church in America*, 114-28. On Choi's theological view of ritual and religious practices, the "Theories of the Origins of Crimes" pamphlet puts it most succinctly: "The purpose of religion and philosophy is to deliver man from sin and to bring him peace and happiness by showing the way of life and by clarifying the cause of unhappiness and crimes. It is not to absorb him in rite or formality." Choi, *Principles of Education: Theory of the Origin of Crimes*, 3.

⁹⁸ Choi, *Principles of Education: Theory of the Origin of Crimes*, 3.

⁹⁹ Ibid., 10.

¹⁰⁰ Ibid., 9.

¹⁰¹ Re-Education Foundation, "Does God Exist?," (Pamphlet, 1969) New Religious Movements Organizations: Vertical Files Collection, GTU 99-8-1, The Graduate Theological Union Archives, Berkeley, CA, 1.

¹⁰² Ibid.

¹⁰³ Ibid., 2.

¹⁰⁴ Ibid.

¹⁰⁵ Ibid., 4.

¹⁰⁶ Sun Myung (trans. Won Pok Choi) Moon, "Master Speaks: God, Myself, and the Country of My Assignment (Ms-476), 21 April 1975," (Leaflet, 1975) New Religious Movements Organizations: Vertical Files Collection, GTU 99-8-1, The Graduate Theological Union Archives, Berkeley, CA, 3.

¹⁰⁷ Re-Education Foundation, "Does God Exist?," 4.

CHAPTER 4: SCIENCE IN THE AMERICAN UNIFICATION CHURCH

From Unificationist Movements to the Unification Church

The Unification Church did not exist in the United States in 1969. Certainly Unificationists lived in America, and three different Unification movements operated in the country, but the Church did not exist in the sense of a single organization that represented the American interests of the Korean Holy Spirit Association for the Unification of World Christianity (HSA-UWC). Young Oon Kim's American HSA-UWC, having subsumed Bo Hi Pak's smaller movement and now based out of Washington, D.C., competed with David S.C. Kim's Northwest Family, which in turn competed with Sang Ik Choi's Re-Education Foundation. Those with more literary than institutional interests could choose from Miss Kim's *Divine Principles*, Mr. Kim's *Individual Preparation for His Coming Kingdom*, or Choi's *Principles of Education*, each of which presented a variant form of Unificationist thought. All three groups had outposts in the San Francisco Bay Area, the hotbed of American's surging counterculture. Michael Mickler, a Unificationist scholar, summarized the Bay Area situation as "a focal point of confrontation among the three groups. Disparate methods of proselytization, interpretations of the Principle, and overall style led to mutual suspicion, distrust and lack of communication."¹

American Unificationism lacked organizational, theological, institutional, and charismatic cohesion. Only one person could provide the unity that the three competing evangelists lacked, and in December 1971, the Reverend Sun Myung Moon arrived in

North America to stabilize, solidify, and encourage the growth of the American movement. Other scholars have chronicled the history of Moon's efforts to unify the group, which included centralizing outreach efforts, rotating members through different centers, and reforming Unification institutions.² However, these histories, generally produced by sociologists, tend to ignore one crucial factor in the solidification of the movement: the emergence of a unified theology as codified in a new translation of the Unification sacred text, simply titled *Divine Principle*. Unlike the three previous competing editions, all of which drew in one manner or another from the *Wolli Hesul* ("Explanation of the Divine Principle"), the new 1973 English edition directly translated the *Wolli Kangron* ("Exposition of the Divine Principle"), the expanded Korean language text that served as backbone of the movement. Produced by Dr. Won Pok Choi (unrelated to Sang Ik Choi), *Divine Principle* brought the disparate Unificationist groups under a single theological roof, one that contained the presuppositions and positions of all three earlier translations. Like Ms. Kim's *Divine Principles*, the new *Divine Principle* assumed the occult and defended the reality of spiritual personages, encounters with them, and gifts of the spirit. Similar to Mr. Kim's *Individual Preparation*, the new text exalted the Unificationist religion as the best system of values, one that ought to guide the world's other religions and sciences. And like Mr. Choi's *Principles of Education*, the *Divine Principle* reached out to secular audiences by declaring science the basis of human cognition and preaching the need for a new scientifically-oriented religion for the future. Dr. Choi's *Divine Principle* served as authoritative for the group until the Church commissioned a new translation in 1996.³

This chapter traces the major Unification positions on science through the *Divine Principle* and the Unification institutions that the group founded in the 1970s and 1980s. Through their texts and organizations, the Unification Church upheld the three basic positions detailed in the previous subsection: 1) respect for science as a positive force for humanity, 2) consideration of religion as a parallel endeavor that ought to follow similar methods as science, 3) valuation of religion generally and Unificationism specifically as offering ultimate solutions that could serve as guides to both science and religion. These positions both assumed the basic approach of envisioning religion and science as separate spheres, as well as supported the movement's millennial perspective that it needed to shepherd science and religion together in order to restore the Edenic kingdom of heaven-on-earth. I will first consider these basic Unification attitudes in their new sacred text, the 1973 Won Pok Choi-translated *Divine Principle*, and then focus on the Unification institutions that followed, namely the Collegiate Association for the Advancement of Principles (the Unification outreach to students and youth), the Unification Theological Seminary, and finally the International Conferences on the Unity of the Sciences.

Religion and Science in the 1973 *Divine Principle*

The 1973 *Divine Principle* not only solidified North American Unificationism, it also greatly expanded the theological base of the movement, providing a detailed English-language philosophy with roots in Korean Christianity, Daoism, and Confucian thought, as well as influences from modern philosophy. It also contained a close English translation of Moon's words, which allowed a direct examination of science in his thought, albeit as channeled through the translation of Dr. Won Pok Choi.⁴ Moon's

history as an electrical engineer shaped the language that *Divine Principle* employed. Scientific metaphors, philosophy, Christian theology, and allusions to particle physics commingled within the text.

The relationship between humans and God serves as a representative example of how Moon utilized science in his treatment of Unificationist religion. Fundamentally, the human/divine relationship required two unequal but necessarily reciprocal parties. In the text, Moon first employed aesthetics as a point of comparison. The relationship between human and God paralleled the appreciation of beauty, *Divine Principle* explained, because both sprung from “the circular movement between a subject and an object, occurring on a horizontal level [that] becomes a spherical one through a three-dimensional orbit. That is, the beauty of the things of creation exists in infinite variety, and this is due to their varied orbit, form, state, direction, angle and speed of individual give and take action.”⁵ Restated in somewhat less arcane language, both beauty and the relationship between human and God owed their existence to an ever-changing subject perceiving an ever-changing object. If the comparison to aesthetics did not satisfy the reader, then *Divine Principle* offered another explanation, one predicated on the physical sciences. The subject/object interaction that gave rise to both the divine/human relationship and the aesthetic of beauty paralleled the relationship of subatomic particles within an atom: “When a proton and an electron, by forming a reciprocal base, enter into give and take action with the proton as the center, there occurs a circular movement which makes the two into one unit, and thus an atom is produced. The proton and the electron also have dual essentialities which are engaged in continuous individual movement. Therefore, the circular movement caused by the give and take action between

the proton and electron does not occur on a horizontal level alone, but constantly changes its angle of movement so that it becomes spherical movement. Thus the atom, too, exists on the three-dimensional level.”⁶ Moon employed comparisons to other scientific disciplines such as botany and human biology throughout the text, but as befitting his technical training, he turned to electricity and magnetism most frequently.

Although the *Divine Principle* did not differ from the Christian-oriented theology of the movement’s earlier texts, the underlying philosophy of the Principle bore a strong resemblance to Daoism, specifically the Daoist sensibility of balance and interrelation between two opposites. Though most frequently associated with Chinese culture, Daoism expanded into Korea during the first millennium, sometime between the fourth and seventh centuries.⁷ Although in Korea it did not assume as highly an institutionalized form as in its Chinese homeland, Daoist sentiment percolated through Korean culture. Daoism envisions the universe as infused by an invisible but real energy or force called the *qi*, which internally exists as a union of two cosmic opposites, the principles of *yin* and *yang*. Daoist expert Isabelle Robinet explains that Daoism postulates “a basic dynamic, Qi, which is neither matter nor spirit, existed before the world did, and everything that exists is only an aspect of it, in a lesser or greater state of condensation.”⁸ Within the *qi*, *yin* and *yang* represent the opposite forces that define each other and together create the various forms and essences of the cosmos. *Yin* and *yang* exist as the opposites such as female and male, dark and light, Earth and Heaven, and passivity and activity, that together form the various substances of the universe. The two, Robinet writes, “testify to the basic Oneness that underlies the world, by the close correlation that binds them together. They illustrate the dynamic of opposites, a dynamic that can be

seen only in pairs whose opposition shows in the law of alternation that governs their functioning.”⁹ From yin and yang, Daoism sees the many elements that comprise the world. That is, Daoism envisions a unity behind a duality (yin/yang), beyond the elements of the material world. Much of Daoist thought and practice considers how to achieve harmony between the two cardinal opposites, for example extolling the virtue of *wu wei*, the ideal of actionless action. In lived practice, Daoist practitioners engage in geomancy (*feng shui*), oracles (using the famous manual the *I Ching*), and alchemical practices meant to lead to longevity and eventually even immortality.

Rather than look to such everyday practices, the *Divine Principle* assumed the balanced dualism of its Korean Daoist background, but recontextualized it in a Christian framework. As the text itself stated, “the ‘Book of Changes (*I Ching*)’, which is the center of Oriental philosophy ... emphasizes that the foundation of the universe is Taeguk (ultimacy) and from this comes Yang and Yin (positivity and negativity). From Yang and Yin come the ‘O-haeing’ (five elements: metal, wood, water, fire and soil). All things were created from O-haeing. Positivity and negativity together are called the ‘Tao.’ The ‘Tao’ is defined as the ‘Way,’ or ‘Word.’ That is, Taeguk produced the word (creative principle) and the Word produced all things. Therefore, Taeguk is the first and ultimate cause of all existence and is the unified nucleus of both positivity and negativity. By comparing this with the Bible (John 1:1-3), ‘The Word was God...and all things were created through him,’ we can see that Taeguk, the subject which contains positivity and negativity, represents God, the subject who contains dual essentialities.”¹⁰

The union of particle physics with Daoism and Asian conceptualizations of interdependence would have resonated with a subset of American readers of *Divine*

Principle. Just two years after the publication of the Unification text and during the height of the Unification Church's early phases of growth in the United States, American scientist Fritjof Capra's *The Tao of Physics* swept through academic, scientific, and countercultural circles. Capra described the book as his own attempt to "overcome the gap between rational, analytic thinking and the meditative experience of mystical truths," which he first attempted through hallucinogenic drugs, and later developed through examining mysticism and quantum physics in light of one another.¹¹ Like *Divine Principle*, Capra's book accepted science as a new foundation of human society, but hoped to unify the religious and scientific halves of individual and societies. In a sentiment that echoed those of Sun Myung Moon in *Divine Principle*, Capra declared that he intended *The Tao of Physics* "to suggest that Eastern thought, and, more generally, mystic thought provide a consistent and relevant philosophical background to the theories of contemporary science; a conception of the world in which man's scientific discoveries can be in perfect harmony with his spiritual aims and religious beliefs. The two basic themes are this conception are the unity and interrelation of all the phenomena and the intrinsically dynamic nature of the universe."¹² Though the millennial pragmatism of Unificationism frowned on mysticism, Capra and Moon could agree that Daoist inspired notions such as "unity," "interrelation," and the "dynamic nature of the universe" bridged the divide between religion and science.

Despite the need to bring science and religion together, the distinction between the worlds of spirit and physicality and an ensuing spirit/body dualism characterized the Unification worldview, particularly its understanding of science. The Unification Church insisted that the universe contained more than merely the physical reality accessible

through our senses, which hardly distinguished it from most other religious movements, since religion by its very nature tends to entail such a position. Yet the *Divine Principle* moved beyond merely asserting the reality of the spiritual (i.e. dualism) to promoting a form of parallelism between the material and spiritual. Fundamentally, the spiritual world functioned analogously to the material world, and therefore must be ascertained and studied in a similar manner. *Divine Principle* envisioned the “spirit world”—as the text called the invisible world—as a parallel cosmos to the material one that humans routinely sense and experience, a realm of angels, demons, souls of deceased individuals, and other intelligent aware entities. As real, Moon insisted, as the visible world around us, in fact individuals could observe this spiritual realm using methods analogous to their experience of the physical world. “The invisible world,” *Divine Principle* explained, “like the visible world, is a world of reality. It is actually felt and perceived, through the five spiritual senses.”¹³ Moon insisted that the two worlds must come together, seeking to unify them, as he hoped to unify the world religions, “[a]s it is with the relationship between mind and body, so there can also be no phenomenal world apart from the essential world and no essential world apart from the phenomenal world. Neither can there be a spiritual world apart from a physical world, nor spiritual happiness apart from true physical happiness.”¹⁴

The Principle envisioned the dual existence of mind and body as proof of the invisible spirit world, since few would deny that mind and body together make up a whole person, nor that form (external) and substance (internal) together create the visible physical world. Hence, *Divine Principle* claimed that “[t]he relationship between the essential world and the phenomenal world is similar to that between mind and body. It is

the relationship between cause and result, internal and external, subjective and objective.”¹⁵ Moon labored to demonstrate the reality of the spiritual world for two reasons. First, the authority of *Divine Principle* and Moon rested in the spiritual world, particularly in the revelations passed to Moon from the spiritual forms of Jesus and John the Baptist.¹⁶ Second, Moon defined science as the empirical study of the physical world, and religion as the study and engagement with the spiritual world. Only if the spiritual world was as real as the physical world could religion claim the sort of legitimacy as could its sister, science. This parallelism of the material and spiritual worlds contained the kernel of the Unification Church’s three fundamental positions on science and religion: 1) the inherent value and legitimacy of science in its investigation of the material cosmos; 2) the nature of religion as a parallel or sibling to science that investigated the spiritual realms just as science did the physical world; and 3) the underlying compatibility of and need for both religion and science. Throughout its growth and history in the United States, the Unification Church demonstrated these three basic positions, which culminated in the attitude that religion, and Unificationism especially, must guide science in its methods, aims, and moral bearings. All three positions appeared in *Divine Principle*, as well as existed in materials of the predecessor movements, those of Kim, Kim, and Choi.

The Unification movement accepted science as a valid, legitimate, valuable, and divinely-mandated endeavor. Valid and legitimate, because science aimed to overcome the unnatural condition of human ignorance. Divinely-mandated, because ignorance existed through an unintended violation of the divine order, and the removal of that ignorance represented a restoration of the Edenic state of order, and therefore part of

humanity's redemption. Like the postwar scientists who gushed in *Our Friend the Atom* that science would spread the wonders of the modern world to all humanity, the *Divine Principle* envisioned science as a means towards creating a heaven on earth. That is, the Unification Church transformed science from a merely human endeavor to a godly one.

Such a position emerged from the Unification view of ignorance: according to the *Divine Principle*, the primordial fall of humanity in the garden of Eden injected ignorance into the cosmic order. "Seen from the viewpoint of knowledge," *Divine Principle* indicates, "the human fall signifies man's descent into the darkness of ignorance."¹⁷ Ignorance requires a predicate—one must be ignorant of something—and on this topic Moon is somewhat vague. Humankind became ignorant of the intended divine order of things, but seemed to also have developed an innate ignorance that characterizes human society. The crucifixion of Jesus, for example, was born of such ignorance. At times Moon indicated that the world itself has become a place of ignorance, a claim that relied upon the Daoist-inspired notion of correspondence between internal and external realities. Individual human internal ignorance sowed the seeds of global social ignorance.¹⁸

Despite the prevalence of ignorance, *Divine Principle* understood it to be an unnatural state of affairs, one that humanity inherently sought to overcome. Since ignorance interrupted the divinely mandated order of the cosmos, the struggle against it assumed a religious meaning akin to the millennial quest to reestablish the Edenic state. "[F]allen man has struggled unceasingly to restore the Kingdom of God on earth, which God originally intended. He has done this by seeking to overcome internal and external ignorance."¹⁹ Because the world is intrinsically dualistic, characterized by visible and

invisible (or material and spiritual) realities, ignorance must be dispelled on two fronts. Within this endeavor Unificationism recognized the value and purpose of science: “due to the fall, man fell into ignorance of both the spiritual side and the physical side [of reality]. From this point, man’s spiritual ignorance has been enlightened by religion while his ignorance of physical reality has been overcome by science.”²⁰ Or, as the introduction to the *Divine Principle* grandiosely stated,

However, due to the fall, man fell into ignorance without being able to attain a highly developed society. Since then, he has striven to restore the ideal world of scientific development which was purposed in the beginning, by overcoming his ignorance by means of science. Today’s highly developed scientific world is being restored externally to the stage directly prior to the transition into the ideal world.²¹

Lest the reader remain unclear as to the nature of science, the *Divine Principle* explicitly declared it the attempt to “overcome this ignorance and restore the light of knowledge ... the path taken toward the discovery of external truth.”²² Here the 1973 *Divine Principle* fundamentally agreed with the thought of Young Oon Kim, David S.C. Kim, and Sang Ik Choi.

Reverend Moon certainly did not invent the notion of science as an activity intended to dispel ignorance and spread the light of knowledge, nor would anyone greet that as a new revelation. A classic understanding of science, this view developed throughout the Enlightenment, became prevalent among many nineteenth century intellectuals, and remained powerful in the late twentieth century as Unificationism’s spread to the United States. Enlightenment thinkers such as David Hume and Jean-Jacques Rousseau basked in the light of science, envisioning ignorance as a darkness that would disappear if only science could more brightly shine. In the nineteenth century, social scientist Augustus Comte founded the school of positivism, or the “religion of

humanity,” as he called it, which declared empirically-observable scientific facts the basis of all philosophy and theology. Comte declared that the old beliefs of religion, Catholicism especially, faded under the observation of science.²³ In the twentieth century, scientists such as the astronomer Carl Sagan continued to look to science in the same way. Sagan appropriately titled his 1996 book *The Demon-Haunted World: Science as a Candle in the Dark*, since the author hoped to employ the tools of science to dispel popular ignorance about subjects ranging from UFOs to ESP to Atlantis to religion itself. The Unification Church shied away from the scientific triumphalism of Comte and Sagan, both of whom looked to science as the ultimate truth and religion as an outmoded manner of thought. However, like Comte and Sagan, Moon imagined science as a great light that dispelled the darkness of ignorance.

Within Unificationist thought, science and religion offered a two pronged attempt to overcome ignorance. If science represented the pursuit of material knowledge, then religion, in a parallel endeavor, considered the spiritual world. As a result of this position, *Divine Principle* portrayed religion as something between a twin of and a type of science. Unificationism posited that religion and science complemented each other, that while science considered the visible and external worlds, religion studied the internal and invisible worlds. Equally real worlds, the *Divine Principle* insisted on the study of each as necessary to dispel the ignorance foisted upon humanity by the Edenic fall. Of science, the *Divine Principle* declared: “[o]n the [one] hand, man’s physical ignorance has been greatly overcome by the scientific research of the ‘world of result,’ the natural (or physical) world which is familiar to everyone.” In terms of religion, it continued, “man’s spiritual ignorance has gradually been overcome as he searched for the invisible

‘world of cause’ through religion.”²⁴ Parallel developments, religion and science both sought answers to questions about the dualistic world. Science asked questions such as ‘what is the basis of the material world?’ and ‘what are the natural laws of physical phenomena?’ Religion asked ‘what is the origin of humanity?,’ ‘what is the purpose of life?,’ and ‘What is good and evil?’²⁵

Here the *Divine Principle* treaded on well-worn ground, reiterating the classic argument that religion and science exist as separate spheres. During the heyday of Unificationism’s rise in the United States, the paleontologist and Harvard professor Stephen Jay Gould (1941-2002) perhaps best represented the mainstream appeal of the separate spheres approach. Although an accomplished scientist, Gould also thrived in the role of a public intellectual, and his *Rock of Ages: Science and Religion in the Fullness of Life*, published in the waning years of his life, succinctly summarized the ideological positions that he held throughout the decades. Gould coined his own term, “Non-Overlapping Magisteria,” (NOMA) to explain why religion and science could coexist as mutually distinguishable realms of human knowledge and activity. Borrowing the Latin term “magisteria” from its Catholic context, where it means a domain of authoritative teaching, Gould’s NOMA doctrine limited religion and science to two mutually exclusionary separate spheres. “Science tries to document the factual character of the natural world, and to develop theories that coordinate and explain these facts. Religion, on the other hand, operates in the equally important, but utterly different, realm of human purposes, meanings, and values—subjects that the factual domain of science might illuminate, but can never resolve.”²⁶ Although this argument has its advantages, especially for those who willingly turn to science for factual data and religion for moral

guidance, it failed to impress critics who insisted that their religion possessed empirical truths, which could range from the age of the Earth, to the manner in which humans and animals appeared on the Earth, or when human life begins. In the eyes of critics, Gould's position and similar separate spheres approaches limited religion to near irrelevancy, effectively emasculating its ability to present truth-statements in the public sphere. Yet the *Divine Principle* in adapting this approach retained a much stronger position for religion, because it accepted the reality of the spiritual world, a cosmos beyond the ability of science to comprehend. "A sailor making a voyage on the sea of the material world under the sail of science in search of the pleasures of the flesh may reach the coast of his ideal," the *Divine Principle* admitted, "but he will soon find it to be nothing more than a graveyard to hold his flesh. But when the sailor who has completed his voyage in search of external truth under the sail of science comes into contact with the sea-route to internal truth, under the sail of religion, he will be able to end his voyage in the ideal world, which is the goal of the original mind's desire."²⁷

Such a position admitted a valid sphere of research for religion, but it also implied that the best religion looked and acted like science. That is, Unificationism saw religion as needing to adopt the methodology and techniques of science, but apply them to the spiritual realm. The best religion therefore employed rationalism, empiricism, and logic, and not, as Kierkegaard would have it, faith. A true heir to the Enlightenment-era Protestant Reformers as well as Choi's *Principles of Education*, the *Divine Principle* admitted that previous generations might have accepted miracles and wonders as evidence of divine favor, but such an age had passed. The book's introduction explained, "Jesus' performance of miracles and his revelation of signs were to let the people know

that he was the Messiah and enable them to believe in him. Knowledge comes from cognition, and man today cannot cognize anything which lacks logic and scientific proof.”²⁸ In classic Protestant form the text implied that miracles functioned as proof for earlier eras, yet could no longer do so in the modern scientific world.²⁹ It continued, “[t]o understand something, there must first be cognition. Thus, internal truth also requires logical proof. Religion has been moving through the long course of history toward an age in which it must be explained scientifically.”³⁰ The *Divine Principle* explicitly assumed that potential converts to Unificationism wanted a scientifically-grounded religion, one that appealed to their cognitive abilities rather than emotions or faith.

In a not-so-subtle jab at other religions, the movement’s sacred text declared, “[i]t is thus impossible to satisfy completely man’s desire for truth, in this modern scientific civilization, by using the same method of expressing the truth, in parables and symbols, which was used to awaken the people of an earlier age. In consequence, today the truth must appear with a higher standard and with a scientific method of expression in order to enable intelligent modern man to understand it.”³¹ Such a position, we shall see, impacted the methods and rhetoric of Unificationist proselytizing, and also explained what the movement saw as the declension of Western religion. *Divine Principle* explained such decline as the result of two factors. First, individual church leaders acted immorally, casting shame on the whole of religion. Second, religion failed to keep up with the times. “Another factor has fated religion to decline. Modern men, whose intelligence has developed to the utmost degree, demand scientific proof for all things. However, religious doctrine, which remains unchanged, does not interpret things scientifically. That is to say, man’s interpretation of internal truth (religion) and his

interpretation of external truth (science) do not agree.”³² The Unification movement looked to possible solutions to this problem. It would sponsor events designed to bring religious groups together, as well as the conferences meant to shepherd science towards a common goal of serving humanity. Behind those attempts, the Church held onto the millennial hope of finally bringing together science and religion.

If Unificationism saw science and religion as a two-pronged attempt to overcome ignorance, then much of the creative tension in the Church’s engagement with science emerged from confusion over whether science and religion were two prongs of the same fork, or two individual utensils descending upon the same morsel of truth. That is, must science and religion act in complete parallel, or ought they remain totally independent? Generally, the *Divine Principle* and Unificationism adopted a two spheres approach to science and religion, seeing each as necessary. Simultaneously it held hope for guiding science in accord with its own religious positions. In most cases, the text clearly portrayed science and religion as separate, though perhaps not equal, spheres. Just as “[n]either can there be a spiritual world apart from a physical world, nor spiritual happiness apart from true physical happiness,” Unificationism declared the need for both religion and science.³³ In a statement that admitted to the power of science yet sought to stake a claim for religion as well, the introduction to *Divine Principle* declared that humanity “has been approaching a solution to the fundamental questions of life by following two different courses. The first course is to search for the solution within the material world. Those who take this route think it to be the sublime path. They yield to science, taking pride in its omnipotence, and seek material happiness.” Yet, *Divine Principle* asked, “can man enjoy full happiness when he limits his search to external

material conditions centered upon the physical body? Science may create a pleasant social environment in which man can enjoy the utmost in wealth, but is such an environment able to satisfy the spiritual desire of the inner man?”³⁴ However, though science without religion offered only limited happiness, religion without science provided equally unsatisfying results. “Religion has until now de-emphasized the value of everyday reality; it has denied the value of physical happiness in order to stress the attainment of spiritual joy. However strenuously man may try, he cannot cut himself off from reality, nor can he annihilate the desire for physical happiness that follows him always like a shadow.”³⁵

Such a reading implied that religion and science must coexist as separate entities, and much of Unificationism’s engagement with science supported such a position. In his founder’s addresses at the ICUS conferences, for example, Reverend Moon accepted that the two had legitimate reasons for their separate existence, albeit his statements sometimes implied that he acknowledged more than espoused that position. Indeed, *Divine Principle* simultaneously hinted that religion and science ought not remain separate and that they might, in keeping with the movement’s greater ambitions, unify. In a larger sense, the text explains, “[s]ince man can attain perfect personality only when his mind and body become harmonized in perfect oneness, the ideal world can be realized only when the two worlds—one of essence, the other of phenomena—have been joined in perfect unity.”³⁶ The logo used by the Unification Church-sponsored 1989 Assembly of the World’s Religions provided a visual indication of the Unificationist position. There, at a conference dedicated to bringing the world’s religions together, the delegates met under a banner bearing a symbol of a single circle, surrounded by two linked semicircles,

enclosed by the three elliptical orbits. For the postwar American, the symbol conjured a familiar image: that of the atom.

Reaching Out: Science and World Transformation

Unlike many new religions, the Unification Church generally eschewed sectarianism and separatism. As a progressive millennial movement, to use Wessinger's term, they sought to engage and transform society rather than retreat from it. In their study of Unificationism, David Bromley and Anson Shupe labeled the Unification Church a "world-transforming" movement, that is "one that aims at total change of the social structure through employing persuasion as its primary strategy."³⁷ As opposed to "world-denying" movements that isolate themselves from what they consider the polluting or irredeemable elements outside their own group, world-transforming groups engage the world in hopes of remaking it according to their own ideals. The Unification Church indeed aimed to transform the world, and looked to science as a tool towards that end. Among the ways in which Unificationism sought world transformation, they established semi-independent agencies and institutions to spread Unificationist ideals outside the movement itself. As critics have charged, some of these "front" organizations failed to clearly reveal their association with the Unification Church, while others even intentionally mislead people, although the majority publicly disclosed their affiliation.³⁸ By definition they promoted a type of indirect proselytizing, hoping to spread the Unificationist message, even if most of the agencies did not seek converts. Fundamentally, the Church envisioned its organizations as actors in the establishment of the new millennium, and individual Unificationists looked on their involvement in these

agencies as part of their religious service. As an advertisement for one of the movement's workshops declared, "in the Divine Principle Seminar, you can learn that today is the precious, long-awaited time when, with God's help, we can completely transform this world into the Kingdom of Heaven on Earth."³⁹ Many of the semi-independent Unification agencies looked to science as an aid to establishing that Heaven-on-Earth.

As one of the largest of those semi-independent groups, the Unification-financed student organization, the Collegiate Association for the Research of Principles, more commonly known by its acronym CARP, brought Unification principles to college campuses and the youth subculture more broadly. CARP primarily worked through a widely-available newspaper, the *World Student Times* rather than through face-to-face dialogue. The newspaper did not officially reveal its relationship with Unificationism, though most issues in their back pages printed summaries of Unification principles alongside a picture of the Reverend Moon labeled "Rev. Sun Myung Moon—the inspiration of CARP." CARP also provided a good example of the way in which a Unificationist organization looked to and utilized science in its world-transforming mission. The *World Student Times* frequently published stories related to science, often stressing the key points of Unificationism's position on it—the value of science, the compatibility of science with religion, the need for religion to become more scientific and rational, and of course the value of Unificationism in guiding the two.

The Collegiate Association for the Research of Principles sometimes employed its *World Student Times* to subtly hint at the Unification view of science, rather than declare it outright. The *World Student Times* coverage of the 1978 Nobel Prize in Physics

provides a representative example. The three-column story detailed the prize given to Arno A. Penzias and Robert W. Wilson for their work on the Big Bang theory, specifically on cosmic background radiation. After summarizing the theory and the scientists' research, the article's third column focused on its relevance to religion. "Questions arise such as: What cause produced this effect? Who or what put the matter and the energy into the universe? Was the universe created out of nothing or out of some pre-existing matter? For the first time there seems to be substantial evidence for a First Cause." Like the pamphlet produced by Sang Ik Choi's Re-Education Foundation a decade earlier, the *World Student Times* article alluded to a time-honored philosophical proof of the deity's existence, in this case the cosmological argument. As stated by Aristotle and later Aquinas, the existence of the universe implied a Prime Mover or First Cause, which both philosophers identify as God. Science, the Unificationist newspaper claimed, had now provided "substantial evidence" for the cosmological argument. The article continued, "[t]heologians were generally delighted but the astronomers were curiously upset by this." Such a subtle jab at scientists, following a prolonged discussion of the research's importance, served to simultaneously highlight the value of astronomical science itself in providing evidence of God's existence, while reinforcing the value of religious answers over and against the authority of individual scientists. Lest the reader forget that there were good scientists as well, the article approvingly cited Albert Einstein as endorsing of the concept of a "beginning," which the article implied was equivalent to the First Cause. The article concluded with a reminder that CARP and the *World Student Times* asked only for evidence, implying of course a distinction from other religious groups which depended upon faith: "pure faith is now reassuringly

connected with science and one can now wait for further clarification and bridged over the gaps of understanding.”⁴⁰

Other *World Student Times* articles more directly and forcefully made the connection between Unificationism and science. An October 1980 article, “An Introduction to the Divine Principle,” highlighted the scientific nature of Unificationism. It introduced the *Divine Principle* as “a framework in which to order, interpret and give meaning to the empirical data of our daily life. Its unique appeal to idealistic, intelligent young people rests firmly in its teaching of the complementary importance of faith and reason.” Few religious movements would refer to their sacred texts as “frameworks” for interpreting “empirical data,” and of course the Unification Church more commonly characterized the *Divine Principle* as a revelation that completed the Christian Bible. Yet the *World Student Times* portrayed the movement’s text using explicitly scientific terminology. Clearly, the church sought to portray itself as modern, scientific, rational, and entirely compatible with the contemporary world. Adopting an almost apologetic tone, the article explained: “[o]ur physical universe is an effect, as [the] result of some ‘unknown’ cause. Let us call this invisible cause ‘God.’ This is the same line of reasoning that allows us to ‘believe in’ and even utilize X-rays by observing the effect (exposed film) of these invisible causal agents. Thus, science, logic, and reason all support the existence of an invisible causal agent for our visible, resultant universe. *Divine Principle* simply calls this causal agent ‘God.’” With “belief,” “God,” and even “unknown,” safely cordoned off by double quotes, alongside a technical metaphor that invoked modern particle physics, the text made its explicitly religious message more palatable to the authors’ intended audience: idealistic, intelligent, scientifically-attuned

young people. This article concluded along the same lines as the previously discussed article, with a rhetorical insistence on Unificationism's authority. The *Divine Principle*, it explained, offered both practical guidelines as well as the answer to the scientific question of "the origin of the physical universe."⁴¹

In its interpersonal outreach, CARP also highlighted science. In September 1975 the Unificationist periodical, *The New Hope News*, printed an update on the Arizona branch of the Unification Church, specifically their new CARP center at Arizona State University. A photo accompanied the article of three smiling CARP students with a large poster behind them. The poster read: "INTERNATIONAL IDEAL COMMUNITY. Collegiate association for the research of principles." Under these headers, the poster asked "What is a man?," accompanied by a line drawing of Rodin's *The Thinker*, the famous sculpture of a contemplative man with hand on chin, deep in thought. Beneath the illustration, the poster showed two columns of terms, joined at their bases by the phrase, "Unification Principle":

<u>Spiritual</u>	<u>Physical</u>
religion	science
morals	technology
idealism	materialism
east	west
___ Unification Principle ___ ⁴²	

Although the article did not explain the meaning of the photograph or the poster that it contained, it did reveal that the Arizona State University branch of the Collegiate Association for the Research of Principles had undertaken an outreach campaign in the hopes of gaining members for the Association, and they hoped the Church as well. The

poster itself showed the underlying presuppositions of the CARP students, and mirrored the *Divine Principle* and other Unificationist statements on science. Like the Daoist-inspired opposites of yin and yang, the simple chart created a set of binary opposites as well as two sets of related concepts. East contrasted west, idealism opposed materialism, and the whitespace between columns separated religion and science. But, at the same time “spiritual, religion, morals, idealism, and east” existed as a single category, as did “physical, science, technology, materialism, and west.” Bridging the two categories, the “Unification Principle” promised harmony and, in so many words, unification.⁴³

Many other Unification outreach groups similarly invoked science, either offering unifying solutions or situating themselves as scientifically-attuned organizations. For example, the Freedom Leadership Foundation (FLF), a Unification anti-communist agency led by future Unification Church president Neil Albert Salonen, published a pamphlet in the mid 1970s trumpeting that “[t]he Freedom Leadership Foundation does not meet the Communist challenge in a passive or defensive way. It projects a positive alternative, a dynamic synthesis of religious and scientific thinking—the Unification Ideology.” A page later, the pamphlet explained that “[t]he Unification Theology overcomes outdated Marxist theory by showing scientifically that cooperation and harmony—not contradiction and struggle as Marxism asserts—are the motivating forces of human progress.”⁴⁴ Like Sang Ik Choi’s San Francisco based Re-Education Foundation a decade earlier, the FLF minimized its religious orientation in this example of its proselytizing material. One might view the pamphlet as evidence of a cover-up or intentional deception. Yet given that the FLF publicly revealed its association with Reverend Moon and the Unification Church, a better explanation sees the pamphlet as

evidence of a group that highly valued science and sought to convey its compatibility with the modern, scientific world.

Turning In: Science and Institutionalization

During the early to mid 1970s the Unification Church not only sought to transform the world through the Collegiate Association for the Research of Principles, the Freedom Leadership Foundation, and other outreach agencies, it also institutionalized itself. With a unifying sacred text, *The Divine Principle*, a more centralized organizational structure led by Moon himself rather than competing evangelists, and a rising cash-flow from its increasing membership, the Unification Church turned toward establishing institutions that served the movement's members themselves rather than recruit new ones. Of these, the Unification Theological Seminary (UTS) provided a crucial educational center to train Unificationists and serve as intellectual hub of the American movement. Unification scholars associated with the UTS further developed English-language Unification theology, while seminarians formally engaged the study of their movement's ideology and worldview. Given its prevalence in their sacred text, unsurprisingly its faculty and students considered science and its relation to Unificationism.

Purchased in 1974 from the Christian Brothers, a monastic Catholic educational order, the site that became Unification Theological Seminary in the small town of Barrytown, New York, sits approximately one hundred miles north of New York City along the Hudson River. It occupied a fortuitous geography for a center of a new religious movement. A decade earlier and thirty miles to the southeast in the town of

Millbrook, Harvard professors and counterculture protagonists Timothy Leary and Baba Ram Dass (né Richard Alpert) conducted their (in)famous mid-1960s LSD experiments. Seventeen miles to Barrytown's west sits the town of Woodstock, the utopian Catskill mountain town and namesake of the music festival. Unification Theological Seminary began operation in September 1975 with a faculty of five full-time professors and fifty students.⁴⁵ David S.C. Choi, the Unificationist pioneer and former leader of the Northwest Family, assumed the presidency of the new institution. In his written welcoming message to seminary students, Choi explained the role of the new institution with reference to the offspring of science, technology. "Man's spiritual development has not kept pace with the dramatic technological advances of recent years," warned Choi. Following the *Divine Principle's* lead in understanding spiritual and material as parallel world and pursuits, Choi justified the new UTS as a solution to that problem. "In order to reverse this situation we need leaders whose vision embraces both the material and the spiritual aspects of reality."⁴⁶

Following their president's lead, a number of the seminary faculty turned to questions of religion and science. Five years after UTS's birth, Dr. Kurt Johnson, a part-time instructor at the Unification Theological Seminary, outlined and taught an elective course titled "The Scientific Basis of Divine Principle," which repeated the following academic year, and drew from Johnson's own expertise in biology as well as that of four other scientist-lecturers.⁴⁷ The UTS course catalog described the new course as a "survey of contemporary scientific information and philosophy and its corroborative relation to Sun Myung Moon's Principle of Creation, with a view to developing the student's ability to apply Divine Principle models to his or her particular professional interest."⁴⁸ In the

preface to his course-pack, Johnson explained that “the materials have been prepared as a beginning toward an understanding of ‘The Principle’ and its relation to science.”

However, that science “corroborated” Unificationism, as the course description indicated, became a theme of the course, hence its name, “The Scientific Basis of Divine Principle.”⁴⁹

Johnson’s course covered the history of science as well as the relation of Unification thought to particular scientific fields, such as genetics, health sciences, evolutionary biology, and political science. Like many other instructors, he stated his goals in his syllabus, included in the course-pack: “The course will have several goals: 1. To develop an itemization of topics in which Divine Principle can be in dialogue with science. 2. To set goals about developing statements concerning Divine Principle and its particular relationships to various scientific disciplines and their applications. 3. To develop a curriculum of science and religion at the Seminary. 4. To become conversant about science and the Divine Principle in a credible way.”⁵⁰ Generally, Johnson looked to science as a form of knowledge that paralleled religion and provided valuable support to the Unificationist perspective. The same basic Unificationist approach to science found in *Divine Principle* also underlay Johnson’s course. Similar to other Unificationist texts, the course-pack included a chart that related science and religion to each other, setting up two neat columns or separate spheres. In the case of the Johnson course’s booklet, the chart appeared on the first page of readings for the first lecture:

Religion	Science
internal experience	external experience
language of expression of truth through ‘myth’ and abstraction	language based on recording observations and ideas about what these mean
based on personal experience and	concerned with nonpersonal,

otherwise not testable	testable experiences ⁵¹
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In keeping with wider Unificationist perspectives, and nearly identical to the CARP chart previously discussed, Johnson envisioned religion and science as parallel but compatible entities.

The instructor also provided a more theoretical basis to the separate spheres approach, explaining that science and religion fundamentally differed because science “[h]as traditionally been ‘inductive,’ assembling many small observations and using these to reason to a larger generality.” Religion, on the other hand, “[h]as traditionally been ‘deductive’: it tells you what is true and everything is patterned from that point of view.”⁵² Yet this distinction, Johnson declared, proved illusionary. Leaning on the philosopher of science Karl Popper, Johnson explained that science also followed a deductive system of hypothesis that sought out data, rather than blindly assemble data and then create a hypothesis. Alluding to Thomas Kuhn (whom he discussed in a later lecture), Johnson indicated that sets of such hypotheses form the basis of science for a time, but that “these can change as science progresses.”⁵³ Science, like religion, offered a paradigm to the world.

The fact that the two shared an epistemological foundation indicated to Johnson that one could combine them to solve the problem of resolution. “How is reality to be observed, how is it to be talked about, how is it to be described? Here science and religion are both seeking answers. Therefore, the marriage of science and religion in a deductive mode is a major step forward in the relation of science and religion.”⁵⁴ Johnson and his guest lecturers dedicated much of the semester to explaining how science and religion could marry, specifically how science supported, or “corroborated” in his

terms, Unification thought. Quantum physics, Johnson noted, “is consistent with the Divine Principle,” as were molecular and evolutionary biology, and political science.⁵⁵ Yet the course offered far more than a scientific rubber-stamp of Unificationism. Johnson introduced philosophy and history of science as well as basic scientific theories to his students, ranging from Popper to Kuhn to quantum physics. He also insisted that his students take science seriously, for example encouraging them to think about ways in which one might read the Principle’s narrative of Adam and Eve alongside evolutionary biology. He concluded the lecture on creation and evolution, the final of three that considered Unificationism and evolutionary biology, with a call to his students to incorporate modern science with religion. “It will behoove Unification members to work as hard as possible to help deal in a credible way between science and Divine Principle. If the restoration of the world is actually an agenda of the Unification Movement, short cuts in relation to science, such as distorting, not understanding, misrepresenting, or oversimplifying concepts in science will only work against the cause.”⁵⁶ Invoking the movement’s millennial ambitions of world transformation, Johnson insisted on an underlying compatibility between religion and science.

The seminary’s students also considered the matter of religion and science outside of class, specifically the role that the rectification of science and religion might play in the hoped-for millennium. With a several hundred page sacred text and an increasing output of theological material produced by Unification thinkers, its first class of seminarians turned to drafting a simple statement of Unification principles to serve as an informal catechism and public declaration of Unificationist sentiments. The resulting four-page document, “Unification Theological Affirmations,” captured the essence of the

movement's theological foundation in twelve basic points: God, Man, God's desire for man and creation, Sin, Christology, History, Resurrection, Predestination, Jesus, The Bible, Completed restoration, and Second coming or eschatology. The Affirmations' short preface invoked the group's millennial ambitions in introducing the catechism. The students wrote that

First, we want to re-inspire theological discussion from new points of view in hope that ultimately all Christianity may be renewed. Second, we want to show in an irreligious age and to an irreligious society that it is again possible to find hope and inspiration in theology and religion. Third, we want to help provide a theology that can stimulate unity among people, families, sexes, races, nations, and churches, so that a new inter-faith movement among all the people of God may be initiated.

Toward such a millennial goal, the "Completed Restoration" section explicitly invoked science as part of the utopian recreation of an Edenic Heaven-on-Earth. The problems of human relationships with each other and with God can be solved, the students wrote, "through restoration of man to God through Christ, and also through such measures as initiating proper moral standards and practices, forming true families, uniting all peoples and races (such as Orient, Occident, and Negro), resolving the tension between science and religion, righting economic, racial, political, and educational injustices, and overcoming God-denying ideologies such as Communism."⁵⁷ Alongside the fight against injustice and the creation of a unified set of moral practices, the UTS students envisioned the resolution of the friction between science and religion as essential to the millennial dream of a completed restoration. In keeping with that sentiment, students at the Unification Theological Seminary served as administrative assistants and volunteers at their movement's institutionalized effort to reduce the tension between science and religion: the International Conferences on the Unity of the Sciences.

The International Conferences on the Unity of the Sciences

The Unification Church was not unique among new religious movements for sponsoring science conferences—both Transcendental Meditation and the Hare Krishnas held such events—but in terms of time-frame, scale, and academic rigor, the Unificationist movement’s International Conferences on the Unity of the Sciences (ICUS) outshined the other religions’. The ICUS conferences also revealed the group’s overarching view of science: that religion, and the Unification Church specifically, must guide science in order to create, in secular terms, an ideal future, or in religious terms, the millennial realization of a heaven-on-earth. Such a position evidenced itself in the manner in which the Unification Church organized and managed the International Conferences, as well as in Reverend Moon’s founders addresses, speeches that he presented at each of the ICUS gatherings.

The Unification Church created the International Conference on the Unity of the Sciences, but it adopted the concept of the ICUS from another organization, the utopian Council for Unified Research and Education (CURE), which held the first, and only, “International Conference on Unified Science,” in 1972 at the Waldorf-Astoria hotel in New York City. The brainchild of Edward Haskell (1906-1986), CURE dedicated itself to synthesizing all knowledge into a single coherent body of “unified science.” Though the Council existed as little more than the project of the independently endowed Haskell, who had never completed his Ph.D. nor worked within the world of academic, government, or industrial science, CURE peaked in 1972 with the publication of a book, *Full Circle: The Moral Force of Unified Science*. The book urged the world’s scientists

to adopt a new standard, that of unified science, “the convergence of insights from all fields,” which would unite all knowledge under a single rubric. Haskell went so far as to develop a chart that collected and organized atoms, molecules, stars, galaxies, and human cultures under a single rubric.⁵⁸ The same year, CURE held the International Conference on Unified Science in order to spread its position. A year earlier the Unification Church had asked Haskell to lead a symposium on unified science, which the church naturally saw as an ally in its utopian ambitions. Moon personally took an interest in Haskell’s work, and approached the scientist to offer his movement’s financial support of a conference on unified science. On the condition that CURE retain sole authority over “subject, persons, discussions, and so forth,” in Haskell’s words, he accepted the offer.⁵⁹ Thus was born the International Conference on Unified Science, held in New York City’s Waldorf Astoria Hotel on Thanksgiving week, with Moon giving a keynote address on “The Role of Unified Science in the Moral Orientation of the World.” Though some anti-cult activists later accused the Unification Church of bankrolling CURE or running it as a front organization, after the second ICUS conference Haskell and CURE went their separate way from Moon and the Unification Church. The Unificationists, however, adopted ICUS as their own and began planning for the conferences’ future. The Council for Unified Research and Education languished and eventually disappeared following Haskell’s death.

Moon and the Unification Church transformed the ICUS from a onetime event founded by an avant-garde scientific outsider to a thirty-year series so scientifically mainstream that it regularly attracted America’s top-clearance nuclear scientists and tenured academic professors from throughout the global community of physical and

social scientists. They also changed its name to the International Conferences on the Unity of the Sciences, eschewing the more sectarian notion of “Unified Science” that Haskell upheld and instead suggesting the broader “Unity of the Sciences” as its goal, using the word “sciences” in the plural form. The second conference, in Tokyo, served as a transition, with Haskell still in attendance alongside a preponderance of philosophers of science and a few physical scientists. The third International Conference, now fully under the wing of the Unification Church, attracted numerous mainstream and highly regarded scientists, with one hundred twenty-eight in attendance, including seventeen Nobel Laureates. The Chancellor of Cambridge University, Nobel-winning neurologist Lord Edgar Adrian, Baron of Cambridge, chaired the conference, with British big scientists R.V. Jones, England’s former head of wartime science and personal scientific advisor to Winston Churchill, and Kenneth Mellanby, head of the Institute for Terrestrial Ecology at Monks Wood Experimental Station, as vice-chairs.⁶⁰ The third ICUS set the tone for the future conferences: the Unification Church’s sub-organization, the International Cultural Foundation, subsidized the meeting and individual Unificationists, primarily students, served as the administrators and support-personnel for the conference. Moon kept a low profile, speaking during the opening banquet for a founder’s address but otherwise absenting himself from the meetings. In fact, the most notable controversy appeared when some of the scientists, including Lord Adrian himself, admitted to not knowing who Moon was or what connection he had with the conference.⁶¹

Although to what degree Moon and his church influenced the proceedings would become a point of contention, throughout the history of the conferences the attending scientists uniformly reported that the Unificationists did not intrude or limit the scientists’

presentations.⁶² Though Moon himself decided on the overall theme for the event, committees of academic scientists, none of them Unificationists, decided on the nature of the panels and sessions and invited participants to present papers at the conferences. Some committees followed the overall conference theme more tightly than others, with the result that the individual papers sometimes had nothing to do with the theme of the overall conference, a reality that became especially prevalent as the conferences grew in size.⁶³ Most of the papers at the third ICUS somehow considered the theme of “Science and Absolute Values,” some narrowly and other broadly. For example, Committee IV, which focused on science, values, and the university, featured papers ranging from “Ideology and Practice of the Democratic University of the Netherlands as Instituted by Law of 1970” (Arthur Rörsch) to “Word and Thought: Towards a Harmony of the Sciences” (Hans Popper).⁶⁴ The twelfth ICUS, by contrast, focusing on “Absolute Values and the Reassessment of the Contemporary World,” and featured everything from a historical paper on Michael Faraday’s apprenticeship, to assessments of nuclear deterrence strategies, to a session on the metaphysics of eco-philosophy.⁶⁵

Moon and the Unificationists realized that few scientists would attend a conference with obvious religious overtones, certainly not if confronted with overt proselytizing. Rather than hope the ICUS series would convert scientists to the movement, the Unificationists looked upon the International Conferences as part of their millennial quest of establishing a heaven-on-earth. The church and the scientists attending its conferences concurred that science offered opportunities for social, individual, and global progress, and the Unification Church focused on this agreement. Reverend Moon’s proposal at the 1981 Tenth International Conference on the Unity of

the Sciences provides a good example. Moon's address at ICUS X held special significance among the many speeches he gave at the ICUS events because for the first time, Moon discussed in depth the Unification Church and its relation to the conferences it subsidized. In explaining his religious movement to scientists, he stressed its millennial ambitions: "religion's purpose is the salvation of the world rather than just the salvation of individuals or families. ... Then what is the Unification Church? It is the new religion destined to carry out this historic mission."⁶⁶ He then made a startling declaration, that the path to world peace and millennial perfection lay in building a transnational highway system that would unite all cultures, religions, and ideologies, beginning with a underwater highway linking China, North and South Korea, and Japan. Science and technology could serve the world by supporting this endeavor. In the written proposal that the Unification Church later produced, based on Moon's speech at the ICUS, the movement's founder explicitly linked the religious theme of millennial tranquility to the development of a technological solution:

Towards realizing this ideal of "humanity as one family and all men as brothers," I propose the building of an International Highway which will link the countries of the East and West. ... This proposal is part of a concrete plan to realize the ideal world of the future as quickly as possible. Such a plan calls for the realization of Heaven on Earth by developing a network of highspeed transportation which will bind the peoples of the world into one.⁶⁷

Moon concluded by calling for scientists and technologists to support his proposal, which would include an invention of long-range "pneumatic tube system" of freight links throughout the world. The scientists in attendance responded by unanimously voting for a resolution supporting "the spirit behind" the proposal, though not the proposal itself, the feasibility of which many of the attendees doubted.⁶⁸

Though Moon downplayed the unification of science in this particular proposal, he nevertheless revealed why the Unification Church continued to support the ICUS conferences: they served its millennial goals of creating the ideal world, which required the support of science and technology in addition to religion. As the church's International Cultural Foundation declared in the sixteenth ICUS's "Statement of Purpose" (1987), "[i]nsights from science, religion, and culture should be harmonized into one worldview as the foundation for a new, global culture transcending the national, religious, racial and ideological biases present within culture. Given this vision of the integral wholeness of the world, it is believed that there can emerge a unified, comprehensive worldview consistent with the human knowledge derived from scientific inquiry as well as from religious and cultural experience."⁶⁹ This statement directly paralleled the perspective of the movement's sacred text, *Divine Principle*, as previously discussed, in its hope for a unified ideology drawing from both science and religion. Unificationist millennialism also explained why the ICUS conferences, like *Divine Principle* and other Unification texts, assumed two mutually exclusive paradigms, the first that science and religion existed as separate spheres, and the second that they ought to merge or unify. The first paradigm held in normal time, but the Unificationists looked to the second as the ideal relationship of religion and science destined by the advent of the millennial age.

An interplay between these two paradigms became evident in Sun Myung Moon's founder's addresses, the speeches he presented during the opulent opening banquets of the International Conferences on the Unity of the Sciences. In each address Moon avoided explicitly discussing the impending union of science and religion that his own

Korean sermons and the Unificationist sacred texts promised. Instead, Moon stressed the separate spheres approach, implying the need for the distinct co-existences of both science and religion. For example, when addressing the sixth ICUS (1976), held in San Francisco, the birthplace of the American Unification movement, he declared that science and religion each asked different questions, in words that Stephen Jay Gould would have felt comfortable speaking. “Religion and philosophy concern themselves with metaphysical and moral questions that have long occupied man’s consciousness.” Conversely, “[s]cience limits itself to concern with the regularities of the universe and understanding things in space and time.”⁷⁰ Rather than conflict, Moon saw innate compatibility between religion and science, both of which sought truth and explanation: “[f]urthermore, in contemplating the mystery and wonder of man and the universe, religion and science, through inspiration, logic, and observation, both seek to explain, or at least point to, the Cause that brought into existence the universe and mankind.”⁷¹ Two years later, in a somewhat more defensive note, Moon insisted that science ought not intrude upon religion’s sphere. Without using the term itself, he singled out questions of ontology as outside science’s purview. Science could study the makeup, function, and behavior of DNA, he allowed, but only religion could comment on how it came to exist. On the matter of origins, science needed to cede to religion.⁷²

As such a warning indicates, Moon did not abdicate to science the role of sole arbiter of truth. He did not, in other words, follow Gould in declaring factual statement the domain of science, and certainly disagreed with Carl Sagan, who looked to science as the only candle capable of illuminating the darkness of human thought and society. Returning to the three basic positions throughout Unification sacred texts, Moon accepted

1) the value of science, 2) and even the need for religion to be scientific, but 3) he also posited the ultimate value of religion over science. In his addresses before the scientists gathered at the ICUS events, Moon would emphasize the first of these perspectives, imply the second, and put the third into practice. The third of these positions, the belief that religion offered value that science could not, underlay the purpose of the International Conferences on the Unity of the Sciences. Science, the Unificationists hoped, would follow the lead of religion, which offered a standard of absolute value around which science might unify itself.

Perhaps working under the sound psychological assumption that one offers praise alongside critique, Moon frequently reiterated the value of science throughout his founder's addresses. Like the *Divine Principle* and its predecessor texts, Moon saw science as a force of human progress, one that offered an increase in quality of life. In the opening of his ICUS IV address, Moon extolled "the original motivation and purpose of science, which is to bring about human happiness."⁷³ Several years later at the eighth International Conference, held in 1979 in Los Angeles, Moon praised science in the sort of glowing language that one expects of a true believer in scientific progress. "Scientists who have had a sense that theirs is a crucial mission as contributors to mankind have continued, on the one hand, to pursue ultimate scientific truth and, on the other, to apply scientific technology in almost every field of human endeavor. The resulting benefits have been fantastic economic growth, material affluence, and physic; [sic] well-being such as mankind has never before known."⁷⁴ Each of his founders addresses included similar accolades to science, though sometimes qualified with language similar to that of

the eighth ICUS, that only some scientists have dedicated themselves to the noble aims of true science.

Moon also, no doubt to the elation of the scientists, remarked on the need for religion to look more like science. Contemporary religion failed, he insisted during his address to the eleventh ICUS, because it could not satisfy the modern scientifically-attuned person. In language echoing that of *Divine Principle*, Moon explained at the eleventh ICUS that “[i]n early times, people were not so analytical or theoretical, and thus were willing to blindly obey such commandments as ‘Love your neighbor as your own body,’ or ‘Be loyal to the king and filial to your parents.’ Today, however, such maxims are questioned.” Just a few minutes later, he even more directly declared that “[u]nless reasonable and consistent answers are available and given, today’s intellectuals are not willing to accept religions such as Christianity.”⁷⁵ Because intelligent people demanded religions that appealed to their intellects and completely accorded with modern scientific finding, the world needed a new religious ideology, one at peace with science. Lest any of the scientists attending the conference doubted to which religion Moon referred, he explicated it: “[i]t is the Unification Church that emerged to solve various problems of the absolute value perspective. This value perspective can, in turn, resolve the great confusion of the world. The Unification Church is comprehensive, logical, and reasonable, and its teachings known as the Unification Principle and Unification Thought have the power to engender total spiritual awakening to all men of conscience and intellect.”⁷⁶

Despite his acceptance of science as the epistemological foundation of modernity, as evidenced in the founder’s address and mirrored in the Unification texts, Moon

insisted that religion, and the Unification Church specifically, offered solutions that science needed. Religion tendered a yardstick with which to measure science, as well a “standard of value” to guide science. Moon concluded his address to the fourth ICUS in millennial language reminiscent of both secular utopian dreams and religious visions of the heaven-on-earth, explaining that science had a role to play in the coming ideal world, a role mediated by religion. “By setting up a new world order where all mankind are brothers and sisters transcendent of national and racial boundaries and living as one human family, we can enjoy the ideal world of true peace and happiness. In order to make such a reality, science must be evaluated from outside the realm of science. Science policy must be determined in consideration of society as a whole. We must not lose the very central point of the whole purpose: science is not for science itself but for the welfare of humanity.”⁷⁷ Though he spoke as the founder and leader of a new religious movement, Moon’s insistence that science must serve wider society reverberated among the wider population. A National Science Foundation funded study just a year later showed that a third of all Americans thought society needed to exert more control over science and that a majority felt science needed to contribute to the alleviating the world’s problems.⁷⁸

At other times, Moon implied that science itself had caused problems that only religion could solve. At the third ICUS, he declared that “we are in a state of imbalance between ourselves and the suddenly expanded reality caused by scientific progress.” Scientists themselves recognized this, Moon insisted, as evidenced by their turn towards the study of the spiritual world. In recent years, the Unification leader explained, scientists had researched meditation, extra-sensory perception, human communication

with dolphins, and the affects of love on plantlife. Science ought to consider spiritual topics such as these, Moon argued, if it truly sought holistic answers.⁷⁹ Moon offered another solution to the imbalance: science needed to unify itself around a central moral axis of absolute values. Departing from the original intent of Haskell in founding the International Conference on Unified Science, that of bringing all knowledge under a single disciplinary system, the Moon-led International Conference on the Unity of Sciences stressed the need for moral unity as the central pole of science. Such moral unity, he insisted, derived only from religion. “It can be said assuredly that the absolute value perspective is established only through religions, which revere God. In other words, it can be validly claimed that no solution to today’s confusion is possible through those thoughts and philosophies which are not founded on God. It follows logically that only through God-centered religion is it possible that mankind can be saved from confusion.”⁸⁰

Yet Moon’s founders’ speeches did far more than merely parrot the standard Unificationist position as developed decades earlier by himself, Young Oon Kim, David S.C. Kim, and Sang Ik Choi, namely that his own movement needed to guide science in order to establish a millennial future. He also commented on timely scientific matters, paralleling the wider discussions among scientific circles, and the view of science in wider society. He regularly touched on issues of pollution, population growth, nuclear contamination, fears of technology out-of-control, questions of who should determine science policy, and whether science needed limits on its methods and ambitions.

Moon’s address to the second ICUS, provided an example of how Moon both invoked Unification theology and commented on the state of contemporary science.

Recalling the Daoist-inspired notions of duality between subjects and objects that infused his movement, Moon lamented that “[a]s I see it, men of today are losing their subjectivity over science, and it looks as though man’s ability to control scientific technology, which he himself has developed, is gradually being weakened.”⁸¹ Within Unification theology, God and humanity relate as subject and object, just as husband and wife, parents and children, masters and disciples, ancestors and descendants all similarly relate according to the binary hierarchy. For humanity to lose its subjectivity over science implied a breakage of the natural order. Although Moon did not specifically elaborate how humanity had lost control over technology, a few minutes into the speech he cited pollution as one example of science and technology out of control.⁸² He also offered a solution to the broader problem: Moon insisted that science needed to unify around a standard of value, “to establish a true standard of value for the common benefit and welfare of all mankind” based on the universal value of love, specifically that of “the one absolute Being who is the only subject of this absolute love.”⁸³ Throughout the 1970s, Moon would periodically return to environmental concerns in his founders addresses as examples of science not controlling its technological output. For example, his speech to the third ICUS specified the problems caused by resource scarcity, population growth, pollution, nuclear testing, and ozone depletion.⁸⁴

The decade before the initial ICUS conferences had witnessed numerous social critics lamenting the loss of human control over science. On the popular front, American movie audiences had flocked to watch Stanley Kubrick and Arthur C. Clark’s *2001: A Space Odyssey* (1968), with its tale of an out-of-control intelligent computer that murdered its users, a situation only rectified when its sole surviving operator

disconnected it.⁸⁵ Alongside its iconoclastic message, the movie's psychedelic technicolor end sequence popularized *2001* among the emerging American counterculture.⁸⁶ The year of the second ICUS, Ernst Schumacher provided a more literary condemnation of technology run amuck in his *Small is Beautiful* (1973), which called for a redirection of "technology so that it serves man instead of destroying him."⁸⁷ Science and technology, Schumacher wrote, in words that reinforced other critics and would echo through the counterculture, dehumanized individuals and groups when it failed to operate for the general good of humanity. "In the excitement over the unfolding of his scientific and technological powers, modern man has built a system of production that ravishes nature and a type of society that mutilates man."⁸⁸ Surveys from the late 1960s and early 1970s showed a small but noticeable population of Americans—ranging from ten to twenty percent—who worried that science had advanced too quickly, ravaged human relations with the environment, and failed to adequately consider the human ramifications of scientific and technological development.⁸⁹ Sociologists also found a majority of Americans concerned with science's dehumanizing aspects, particularly the tendency of people to feel isolated from their "human side" and "nature."⁹⁰ Moon and the Unification Church reflected such perspectives when they called on science to first and foremost serve humanity's happiness through allegiance to absolute values.

Turning from Moon to the scientists themselves, how did the ICUS participants internalize the messages broadcast by their Unification hosts? Certainly the Unification Church did not succeed in its millennial ambitions of building a new society with science's help. Nor did science unite, either around absolute values or any other central pole. However, the attending scientists did respond to Moon and the Unificationist

movement's cue, discussing the nature of science, its place in the modern world, its relation to religion, how science might be unified, and how it should relate to values. With hundreds of participants over its two decade history, no consensus emerged. Even the scientists serving as chairmen, committee chairs, and keynote speakers failed to agree on not only answers, but even what questions to ask. Some raised similar issues to Moon. André Cournand, Nobel Laureate and American medical scientist, explained in his address at the second ICUS that the fragmented world needed to overcome its divisions. Unlike the Unificationist leader, however, Cournand declared science the best solution. "Because of its universalism, reflected in its traditions as in its methods of operation, science more than any revered [revealed?] religion is suited to assist in this task." This, he explained, would not only heal global rifts, but also defend against the "recent expressions of hostility toward science" and "the decline of public support for science."⁹¹ Along similar lines, Robert Mulliken, the Nobel-winning molecular chemist, declared at ICUS IV that "[w]ith regard to scientific values, as a scientist, my religion is truth, all kinds of truth." Marshalling a symbolic demonstration of science's ultimate truth value over and against religion Mulliken directly followed this statement with the bold declaration: "As humans we are part of the biological world, therefore the fact of biological evolution is a central truth for us. I say fact, not theory, because the evidence is so completely convincing."⁹²

Other scientists considered pointed issues of the day. For example, in his 1975 ICUS paper the University of Chicago sociologist Morton Kaplan focused on the need to consider the ethics of scientific research by calling attention to drug testing procedures, alluding to the Thalidomide drug scare in his description of "new horrors, drugs thrown

upon the market, deformed children, people dead.”⁹³ Seven years later, Jewish theologian Richard Rubenstein, serving as chairman of the ICUS committee on “responsibility of the individual in world society,” devoted much of his chairman’s address to highlighting economic insecurity. “In the United States, for example,” he declared, “many men and women have begun to lose faith in the banking system. They prefer to accept a lesser return on their investment by purchasing Treasury bills and notes rather than certificates of deposit from the banks.”⁹⁴ Rubenstein spoke during the heart of the nation’s Savings and Loans scandals, during which the deregulated industry imploded under the weight of bad loans and forced billions of dollars of deficits onto the federal government. Several years later, as the United States Congress looked to axe the federal science budget, Alvin Weinberg turned to questions of science funding, arguing for the need for scientific efficiency and a unified ideal of scientific merit.⁹⁵

In other words, the ICUS series had little real effect on scientists or American science. Individuals presented papers and addresses on whatever topics seemed most relevant to themselves and their work, but no consensus emerged. However, the Unification Church, through the International Cultural Foundation, continued to fund the International Conferences on the Unity of the Sciences into the twenty-first century, though the conferences occurred less frequently in the waning days of the millennium. Since the ICUS had little impact in the scientific community, critics often wondered why the church continued to fund the enterprise. Such detractors most often accused Unificationism of using ICUS to purchase legitimacy. These criticisms of the International Conferences on the Unity of the Sciences and the Unification Church’s involvement with ICUS cannot be separated from the “cult wars,” the battle between new

religious movements and their detractors. The history of the cult wars is beyond the scope of this dissertation, and other scholars have written detailed treatments.⁹⁶ People opposed new religions for a variety of reasons, ranging from the theological (they have bad theology), to the social (they break up families), to the psychological (they disrupt free will). The cult wars played out in court rooms, academic associations, state legislatures, and the media. Though some critics accused the Unification Church of employing a variety of “magic” to ensnare its victims, others argued that the movement employed normal methods of persuasion to gain new adherents. Such detractors pointed to the ICUS conferences as part of the Unification plan to entrap America’s youth. For example, K.H. Barney, head of the Ad Hoc Committee of Concerned Parents, one of the major anti-Unificationist groups, charged that “[t]he Moon organization uses movies and photos of Moon surrounded by smiling scientists to recruit new members.”⁹⁷ Similarly, the *Boston Globe* reported that in a news conference coinciding with the seventh ICUS in Boston, Barney’s group “warned scientists attending the unity of the sciences conference that their pictures and words would be used for public relations purposes in Korea and elsewhere. They said Moon tries to make his movement more acceptable by aligning it with important people such as winners of Nobel Prizes.”⁹⁸

At the heart of such arguments, these critics argued that Unificationism used ICUS, and therefore science, to purchase legitimacy. The International Conferences, another anti-Moon activist declared, represented “one more instance of Reverend Moon buying respectability for the church.”⁹⁹ Such positions point toward the tremendous power of science, and its legitimacy in the public eye. Surveys of the general American population show that of all vocational fields, the pursuit of science regularly ranks among

the most respected.¹⁰⁰ Much like priests, scientists tap mysterious and explainable powers, and promise technological miracles and other aid. They lend credibility, prestige, and legitimacy to any endeavor. Critics of the International Conferences on the Unity of the Sciences recognized this fact. Of Reverend Moon, the highly respected journal *Science* wrote: “[p]erhaps if any of the scientists took him seriously, they would not be so quick to lend him the prestige of their presence.”¹⁰¹ The *Toronto Globe and Mail* similarly complained that “[t]he presence of a distinguished group of academics lends legitimacy to a conference whose sponsorship is questionable and problematic.”¹⁰² Even the *Christian Century*, bastion of mainline Protestantism, declared that “[f]reedom of speech ... is not the issue. Lending your name to the Moon game of acquiring credibility is.”¹⁰³ Ironically, if there was one thing that Moon and his critics could agree upon, it was the need for scientists to consider moral values in their professional lives. One former member of the Unification Church who became a leading anti-Unification crusader complained of the ICUS scientists, “I think it’s high time these scientists considered their moral responsibilities.” To that sentiment, ironically Reverend Moon would concur!¹⁰⁴

Guiding Science

In its treatment of science, the Unification Church mirrored much of wider American society’s complaints and criticisms of science, but also the general societal acceptance and respect towards science. Science could be too big, too immoral, or too destructive, but overall it was a good thing. Each of the Unificationist missionaries to the United States produced a sacred text that accepted the contemporary power and place of

science, as well as emphasized their own movement's compatibility with science. Their social locations dictated additional comments on science. Young Oon Kim, who worked within an occult Christian framework, treated science with ambivalence. David S.C. Kim's more mainstream Christian perspective highlighted the value of religion over and against science, whereas the more secularly-attuned Sang Ik Choi emphasized the scientific nature of the Unificationist message. The Unification movement that emerged in the 1970s combined these approaches, treating science sometimes as a separate sphere from religion, and other times as an allied approach to understanding the cosmos destined to join with religion during the millennial last days.

Unlike some of the other new religions of postwar America, the Unification Church accepted science as a positive force in American cultural, social, political, and economic life. In fact they embraced science in its most institutionalized form, creating science conferences and inviting professional scientists to attend and discuss the state of their fields. Yet Unificationism also offered two critiques of science. First, science lacked unity, existing in fragmented form across a multitude of projects, centers, and disciplines. Second, unaided by an authoritative set of absolute values, science floundered in relativism and threatened the stability, peace, and health of human individuals and societies. But Moon's Unification Church reached out to science with a solution: scientists themselves must realize the need for centering their disciplines on solving human problems in accord with absolute values. At its International Conferences on the Unity of the Sciences, Unificationism offered a ready-made set of these absolute values, ready for immediate use by scientists. In its understanding of the relationship between religion and science, the Unification Church saw itself as a *guide* for science.

¹ Mickler, *A History of the Unification Church in America*, 134.

² See of Chapter 6: “A National Movement Emerges: 1972-74” in *Ibid.*; Chapter 2: “The Transplantation of the Unificationist Movement” in David G. Bromley and Anson D. Shupe, Jr., *Moonies in America: Cult, Church, and Crusade* (Beverly Hills: Sage Publications, 1979).; Chapter 3: “The Unification Church: An Historical Background” in Barker, *The Making of a Moonie*.

³ The 1977 “Fifth Edition” of the *Divine Principle* became most popular, though it is only a reprinting, rather than new edition, of the 1973 *Divine Principle*. The 1996 translation utilized yet another title, one that matches the Korean text from which its translators worked. Sun Myung Moon, *Exposition of the Divine Principle* (New York: The Holy Spirit Association for the Unification of World Christianity, 1996).

⁴ Unificationists, and the American Library of Congress for that matter, look to Sun Myung Moon as the author of *Divine Principle*, with Dr. Won Pok Choi as translator, as opposed to their view of the previous three texts. I have followed the lead of the church in referring to Moon as the author, aware that the translator shaped the resulting English language of the text. Unificationists of course consider the *Principle* a divine revelation, but accept that Moon shaped the revelation and wrote the actual text of the *Divine Principle*.

⁵ Moon, *Divine Principle*, 35.

⁶ *Ibid.*, 34.

⁷ Song Hang-Nyong, “A Short History of Taoism in Korea,” *Korea Journal* 26, no. 5 (1986): 14.

⁸ Isabelle Robinet, *Taoism: Growth of a Religion*, trans. Phyllis Brooks (Stanford: Stanford University Press, 1997), 7.

⁹ *Ibid.*, 10.

¹⁰ Moon, *Divine Principle*, 26-7. Moon uses the term ‘Tao,’ following the older Wade-Giles transliteration method. Scholars now use the pinyin method, rendering the word as ‘Dao.’ The terms are equivalent.

¹¹ Fritjof Capra, *The Tao of Physics: An Exploration of the Parallels between Modern Physics and Eastern Mysticism* (Berkeley: Shambhala, 1975), 12.

¹² *Ibid.*, 25.

¹³ Moon, *Divine Principle*, 58.

¹⁴ Ibid., 8.

¹⁵ Ibid., 7.

¹⁶ For example, see Moon's September 18, 1974 address in Madison Square Garden, where he explained that he "met Jesus, ... and I met John the Baptist too, in the spirit world." Transcript available in Sun Myung Moon, *The New Future of Christianity* (Washington: Unification Church International, 1974), 101.

¹⁷ Moon, *Divine Principle*, 3.

¹⁸ For example, Moon explains that "[b]ecause of the fall, however, mankind has not been able to realize this world. Instead, man has brought about a world of sin and has fallen into ignorance." Ibid., 13.

¹⁹ Ibid.

²⁰ Ibid., 431-2.

²¹ Ibid., 108.

²² Ibid., 4.

²³ See Auguste Comte, *The Catechism of Positive Religions*, trans. Richard Congreve, 1st English ed. (London: Kegan Paul, Trench, Trübner, & Co. Ltd, 1891), Gertrud Lenzer, ed., *Auguste Comte and Positivism* (New Brunswick, N.J.: Transaction Publishers, 1998).

²⁴ Moon, *Divine Principle*, 432.

²⁵ Ibid., 3-4.

²⁶ Stephen Jay Gould, *Rock of Ages: Science and Religion in the Fullness of Life* (New York: Ballantine Books, 1999), 4.

²⁷ Moon, *Divine Principle*, 5.

²⁸ Ibid., 8-9.

²⁹ The classic treatment of the Reformers' view of the passing of the age of miracles is, of course, that of Max Weber, *The Protestant Ethic and the Spirit of Capitalism*, trans. Talcott Parsons (New York: Scribner, 1958). For a fine treatment of the lingering influence of the early Protestant view of the age of miracles as having passed, see Marcel Gauchet, *The Disenchantment of the World: A Political History of Religion*, trans. Oscar Burge (Princeton: Princeton University Press, 1997), Robert Bruce Mullin, *Miracles and the Modern Religious Imagination* (New Haven: Yale University Press, 1996).

³⁰ Moon, *Divine Principle*, 9.

³¹ Ibid., 131.

³² Ibid., 8.

³³ Ibid.

³⁴ Ibid., 4.

³⁵ Ibid., 8.

³⁶ Ibid., 7-8.

³⁷ Bromley and Shupe, *Moonies in America*, 26. Bromley and Shupe envision their concept of the “world-transformative” religious movement as a corrective to Roy Wallis’s tripartite schema of world-affirming, world-rejecting, and world-accommodating new religions. Wallis himself identified the Unification Church as a world-rejecting movement, a view with which I, along with Bromley and Shupe, disagree. Wallis does not provide a succinct definition of world-rejecting, so it is difficult to refute his assessment. Yet he does provide some characteristics of such movements, for the example that they prescribe clear moral demands, possess clear conceptions of God as personal yet distinct from humankind, view the prevailing social order negatively, and require service to a guru, messiah, or prophet. The Unification Church does share many of these attributes, but these factors hardly indicate that any such movement would deny the world. One could easily imagine many religions, mainstream Christianity among them, possessing these traits, making the category so wide that the world-rejecters in fact comprise the majority of the world! Roy Wallis, *The Elementary Forms of the New Religious Life* (London: Routledge & Kegan Paul, 1984).

³⁸ The Collegiate Association for the Research of Principles (CARP) provided an example of such unethical behavior. In 1977, CARP attempted to establish a wing at University of Texas at Arlington. Its organizer misrepresented himself as a student, obfuscated his organization’s ties to the Unification Church, and broke several campus rules related to employing outside personal in gathering petitions to allow the group to form. The petitions themselves skimmed the surface of ethical conduct, represented CARP as merely an “Oriental Religion.” When a university administrator contacted a random set of the one hundred thirty signers, he found that none of them were aware of CARP’s affiliation with Unificationism. Linda Neighbors, “the Moonies Are Coming, the Moonies Are Coming!” (Term Paper, 1977 (?)) Center for the Study of New Religious Movements Collection, GTU 91-9-03, The Graduate Theological Union Archives, Berkeley, CA, 5. Neighbors does not provide the number of students contacted by the administrator.

³⁹ “Welcome to the Divine Principle Seminar,” (Pamphlet, c. 1970) J. Stillson Judah: New Religious Movements Collection, GTU 95-6-01, The Graduate Theological Union Archives, Berkeley, CA, Fold 1.

⁴⁰ Sraffan Berg, "Big Bang Theory Makes a Commotion," *World Student Times*, 12 December 1978, 6.

⁴¹ Nate Windman, "An Introduction to the Divine Principle: What the Moonies Believe," *World Student Times*, October 1980, 11.

⁴² The original illustration is too small to reproduce here, but is available for perusal in the Graduate Theological Union archives' New Religious Movements Organizations: Vertical Files Collection, GTU 99-8-1, box 38.

⁴³ "Arizona Swings into Student Work," *The New Hope News*, 22 September 1975, 5.

⁴⁴ "The Freedom Leadership Foundation," (Pamphlet, c. 1976) New Religious Movements Organizations: Vertical Files Collection, GTU 99-8-1, The Graduate Theological Union Archives, Berkeley, CA, 4-5.

⁴⁵ The best source on the history of the Unification Theological Seminary is Susan Diane Schroeder's Ed.D. dissertation, "The Unification Theological Seminary: An Historical Study." Although I have also seen sources that indicate forty-six students in the opening class, Schroeder's detailed history of the seminary lists the attendance as fifty, providing names, nationalities, and undergraduate majors of the attendees. Attendance numbers for the following decades fluctuated between a low of thirty-eight in 1984, to fifty-four, in 1987. Susan Diane Schroeder, "The Unification Theological Seminary: An Historical Study" (Ed.D., Columbia University, 1993), 319. In terms of faculty, the seminary opened with five faculty and six administrators, alongside one part-time instructor. Schroeder, "The Unification Theological Seminary: An Historical Study", 148.

⁴⁶ Unification Theological Seminary, "UTS Course Catalog," 1977/1978) American Religions Manuscript Collection, ARC Mss 1, Department of Special Collections, University Libraries, University of California, Santa Barbara, 11.

⁴⁷ Kurt Johnson, "The Scientific Basis of Divine Principle: Religion and Society 590," (Coursepack, 1981) Unification Theological Seminary Special Access Collection, BX9750.S44 J54 1981, iii, Schroeder, "The Unification Theological Seminary: An Historical Study", 438.

⁴⁸ Unification Theological Seminary, "UTS Course Catalog," 1979/1980) American Religions Manuscript Collection, ARC Mss 1, Department of Special Collections, University Libraries, University of California, Santa Barbara, 57.

⁴⁹ Johnson, "The Scientific Basis of Divine Principle: Religion and Society 590," i.

⁵⁰ *Ibid.*, 1.

⁵¹ *Ibid.*

⁵² *Ibid.*, 4.

⁵³ Ibid., 5.

⁵⁴ Ibid., 6.

⁵⁵ For quantum physics, see Ibid., 17-19. On molecular biology, Johnson, "The Scientific Basis of Divine Principle: Religion and Society 590," 21-23.. On evolutionary biology, Johnson, "The Scientific Basis of Divine Principle: Religion and Society 590," 37-8.. On political science, Johnson, "The Scientific Basis of Divine Principle: Religion and Society 590," 72-3.

⁵⁶ Johnson, "The Scientific Basis of Divine Principle: Religion and Society 590," 38.

⁵⁷ Lloyd Ely, et. al., *Unification Theological Affirmations* (Barrytown, N.Y.: Unification Theological Seminary, 1976), 3.

⁵⁸ Edward Haskell, ed., *Full Circle: The Moral Force of Unified Science* (New York: Gordon and Breach, 1972), 174.

⁵⁹ Ibid., 219.

⁶⁰ International Conference on the Unity of the Sciences, *Science and Absolute Values: Proceedings of the Third International Conference on the Unity of the Sciences, November 21-24, 1974, London, United Kingdom*, 2 vols. (Tarrytown, N.Y.: International Cultural Foundation, 1974), xxvii-xxxii, International Cultural Foundation, "What ICUS Is," 4.

⁶¹ Andrew F. Blake, "'Messiah' Sponsors World Science Meet," *Boston Sunday Globe*, 17 November 1974, 62.

⁶² For excellent insider details of the management of the conference, see Kenneth Mellanby, "Attending a Moon Conference," *Nature* 258, no. 5536 (1975). For another take on the same fourth ICUS conference that Mellanby discussed, see Cy A. Adler, "A Moon Shines on Science," *New Engineer*, March 1976. Numerous private correspondences also demonstrate the scientists' view that the Unificationists held little sway over the proceedings: Eccles, "Letter to Participants, October 15, 1976," Daniel Lerner, "Letter to Dr. Morris Zelditch, January 13, 1977," (Personal Correspondence, 1977) Warder [Michael] Collection, ARC Mss 31, Department of Special Collections, University Libraries, University of California, Santa Barbara, Alan C. Nixon, "Unpublished Letter to Editor of *Science*, January 4, 1977," (Personal Correspondence, 1977) Warder [Michael] Collection, ARC Mss 31, Department of Special Collections, University Libraries, University of California, Santa Barbara. Also see media accounts, such as Cooke, "Scientists Defend Role at Moon Parley," Linda Loyd, "Rev. Moon Addresses Conference's 1st Session," *The Philadelphia Inquirer*, 27 November 1982, Linda Loyd, "Science Meeting Told of Religion, Moon Style," *The Philadelphia Inquirer*, 29 November 1982, Richard Miller, "Scientists Exchange Ideas, Hear Rev. Moon's Critics," *Daily Californian* 1977, "Professors Praise Science Meeting Sponsored

by Unification Church,” *New York Times*, 28 November 1977, “Rev. Moon’s Boycotters Are Jealous or Ignorant, Savants Attending Say,” *Sacramento Bee*, 26 November 1977.

⁶³ For example, ICUS chair Morton Kaplan, the University of Chicago sociologist who chaired the ninth through twelfth ICUSs (1980-1983), reported occasional conflicts with Moon over the lack of “any relationship at all between the program and the title.” Loyd, “Rev. Moon Addresses Conference’s 1st Session,” 1.

⁶⁴ International Conference on the Unity of the Sciences, *ICUS III Proceedings*, 1976-372.

⁶⁵ International Conference on the Unity of the Sciences, *Absolute Values and the New Cultural Revolution: Commemorative Volume of the Twelfth International Conference on the Unity of the Sciences, Chicago, Illinois, 1983* (New York: ICUS Books, 1984).

⁶⁶ International Conference on the Unity of the Sciences, *The Search for Absolute Values and the Creation of the New World: Proceedings of the Tenth International Conference on the Unity of the Sciences, November 9-13, 1981, Seoul, Korea.*, 2 vols. (New York: International Cultural Foundation Press, 1982), 10.

⁶⁷ Sun Myung Moon, “Proposal for International Highway,” (Pamphlet, 1981) American Religions Collection, Vertical Files Collection, Department of Special Collections, University Libraries, University of California, Santa Barbara, n.p. Compare to International Conference on the Unity of the Sciences, *ICUS X Proceedings*, 16-17.

⁶⁸ Morton A. Kaplan, “Letter to Dr. J. Gordon Melton, December 15, 1982,” (Personal Correspondence, 1982) American Religions Collection, Vertical Files Collection, Department of Special Collections, University Libraries, University of California, Santa Barbara.

⁶⁹ International Cultural Foundation, “Statement of Purpose of ICUS XVI,” (Leaflet, 1987) American Religions Collection, Vertical Files Collection, Department of Special Collections, University Libraries, University of California, Santa Barbara, 4.

⁷⁰ International Conference on the Unity of the Sciences, *ICUS VI Proceedings*, 9.

⁷¹ International Conference on the Unity of the Sciences, *The Centrality of Science and Absolute Values: Proceedings of the Fourth International Conference on the Unity of the Sciences, November 27-30, 1975, New York*, 2 vols. (Tarrytown, N.Y.: International Cultural Foundation, 1975), 10.

⁷² International Conference on the Unity of the Sciences, *The Responsibility of the Academic Community in the Search for Absolute Values: Proceedings of the Eighth International Conference on the Unity of the Sciences, November 22-25, Los Angeles, California*, 2 vols. (New York: International Cultural Foundation Press, 1980), 11.

⁷³ International Conference on the Unity of the Sciences, *ICUS IV Proceedings*, 7. Cf. Moon's speech to the International Conference on Unified Science, wherein he declared that science primarily aims to create a "happy, ideal society." Sun Myung Moon, *Science and Absolute Values: Twenty Addresses* (Lexington, Ky.: International Conference on the Unity of the Sciences, 1997), 26.

⁷⁴ International Conference on the Unity of the Sciences, *ICUS VIII Proceedings*, 9.

⁷⁵ I am estimating the time interval of several minutes based on the written transcripts. International Conference on the Unity of the Sciences, *Absolute Values and the Creation of the New World: Proceedings of the Eleventh International Conference on the Unity of the Sciences, November 25-28, 1982*, 2 vols. (New York: International Cultural Foundation Press, 1983), 13.

⁷⁶ *Ibid.*, 16.

⁷⁷ International Conference on the Unity of the Sciences, *ICUS IV Proceedings*, 9.

⁷⁸ Attitudes toward Science and Technology, 1976. Survey by Opinion Research Corporation, 13 September-30 September, 1976 (Retrieved 10 August, 2006 from Lexus Nexus Academic Database).

⁷⁹ International Conference on the Unity of the Sciences, *ICUS III Proceedings*, 6.

⁸⁰ International Conference on the Unity of the Sciences, *ICUS XI Proceedings*, 11.

⁸¹ International Conference on the Unity of the Sciences, *Modern Science and Moral Values: Proceedings of the Second International Conference on the Unity of the Sciences, Tokyo, November 18-21, 1973* (Tokyo: International Cultural Foundation, 1973), 571-2.

⁸² Of pollution, Moon explained "[i]f we had created the climate of science centered on human dignity the formidable problem of pollution would have been prevented." *Ibid.*, 572. Moon might also have been alluding to infrastructure chaos, since his November 1973 speech to the second International Conference fell just two months after the beginning of an OPEC Oil embargo of the United States and many other Western nations to punish them for support of Israel, leading to gas shortages and massive inflation. Since the Unification Church held the second ICUS in Tokyo, Japan, Moon's address might also have alluded to the host nation's lingering effects of the nuclear attacks of World War II.

⁸³ *Ibid.*, 573.

⁸⁴ International Conference on the Unity of the Sciences, *ICUS III Proceedings*, 7.

⁸⁵ Stanley Kubrick and Arthur Charles Clarke, *2001: A Space Odyssey* (Metro-Goldwyn-Mayer, 1968).

⁸⁶ For more on the influence of Kubrick and Clark's *2001: A Space Odyssey* on the American counterculture, see the introduction and P. Barton Palmer's first chapter, "2001: The Critical Reception and the Generation Gap," in Robert Kolker, ed., *Stanley Kubrick's 2001: A Space Odyssey: New Essays* (New York: Oxford University Press, 2006).

⁸⁷ E. F. Schumacher, *Small Is Beautiful: A Study of Economics as If People Mattered* (London: Blond and Briggs, 1973), 149.

⁸⁸ *Ibid.*, 275.

⁸⁹ For example, a 1968 survey found that 20% of Americans "strongly agreed" that science had caused the world to change too fast. Two years later, a similar study discovered that 10% of its respondents felt that scientific progress had made life worse. A 1974 NSF-funded study found only 4% felt that science had done more harm than good, but a large proportion (31%) thought that science had done as much harm as good. Harris Survey. Survey by Louis Harris and Associates, January, 1971 (Retrieved 10 August, 2006 from Lexus Nexus Academic Database), SRS Amalgam Survey. Survey by National Opinion Research Center, April, 1968 (Retrieved 10 August, 2006 from Lexus Nexus Academic Database), Attitudes toward Science and Technology, 1972. Survey by Opinion Research Corporation, 13 May-28 May, 1972 (Retrieved 10 August, 2006 from Lexus Nexus Academic Database). For similar results, see Hopes and Fears. Survey by Gallup Organization Institute for International Social Research, 1 October, 1964 (Retrieved 10 August, 2006 from Lexus Nexus Academic Database), Harris Survey. Survey by Louis Harris and Associates, (Retrieved from , Attitudes toward Science and Technology, 1972. Survey by Opinion Research Corporation, (Retrieved from

⁹⁰ The 1971 Harris Survey found that approximately three quarters (76%) of Americans felt that science had surpassed our ability of managing human problems and the "human side" of life, and about the same percentage (72%) agreed with the statement that "science is making people so dependent on gadgets and machines, people don't know what nature is anymore." Harris Survey. Survey by Louis Harris and Associates, (Retrieved from

⁹¹ International Conference on the Unity of the Sciences, *Modern Science and Moral Values: Proceedings of the Second International Conference on the Unity of the Sciences, Tokyo, November 18-21, 1973*, ix.

⁹² International Conference on the Unity of the Sciences, *ICUS IV Proceedings*, 12.

⁹³ *Ibid.*, 1305.

⁹⁴ International Conference on the Unity of the Sciences, *ICUS XI Proceedings*, 22.

⁹⁵ International Conference on the Unity of the Sciences, *ICUS XIII Proceedings*, 35-38.

⁹⁶ For a detailed history of the cult wars, see Benjamin Zablocki and Thomas Robbins, eds., *Misunderstanding Cults: Searching for Objectivity in a Controversial Field* (Toronto: University of Toronto Press, 2001).

⁹⁷ K.H. Barney, quoted in Carr, "Anti-Moonies to Picket His Science Conclave," 23.

⁹⁸ Cooke, "Foes Ask a Boycott on Moon Meeting," 3.

⁹⁹ The woman is identified only by her surname, Greene, as quoted in Miller, "Scientists Exchange Ideas, Hear Rev. Moon's Critics," 12.

¹⁰⁰ Surveys show a consistent approval of science and respect for scientists. For example, a June 1958 survey found science only slightly behind medicine and ahead of all other fields in degree of prestige, when measured by how likely parents were to support their children entering the field. Public Opinion Poll. Survey by Roper Organization, June, 1958 (Retrieved 10 August, 2006 from Lexus Nexus Academic Database). A similar survey in 1974 found nearly identical results when directly querying respondents' "own personal opinion of the prestige or general standing that such a job has," with science ranking just below medicine but above all other fields. 61% ranking scientists as "excellent," and 28% as "good." Attitudes toward Science and Technology, 1974. Survey by Opinion Research Corporation, 19 July-10 August, 1974 (Retrieved 10 August, 2006 from Lexus Nexus Academic Database). See also America's Mood in the Mid-Sixties. Survey by Gallup Organization, February, 1965 (Retrieved 10 August, 2006 from Lexus Nexus Academic Database), Hopes and Fears. Survey by Gallup Organization Institute for International Social Research, (Retrieved from , Harris Survey. Survey by Louis Harris and Associates, 8 October-16 October, 1977 (Retrieved 10 August, 2006 from Lexus Nexus Academic Database), Attitudes toward Science and Technology, 1972. Survey by Opinion Research Corporation, (Retrieved from , Attitudes toward Science and Technology, 1976. Survey by Opinion Research Corporation, (Retrieved from

¹⁰¹ C.H., "Moon's Annual Science Meeting Is Becoming a Tradition," *Science* 194, no. 4271 (1976): 1254.

¹⁰² Toronto Globe and Mail, reprinted in "Professors Praise Science Meeting Sponsored by Unification Church," 10.

¹⁰³ "Moon's Credibility Game," *Christian Century*, 24 September 1975, 813.

¹⁰⁴ Allen Tate Wood, quoted in Carr, "Anti-Moonies to Picket His Science Conclave," 23.

SECTION II: SCIENCE AND THE HARE KRISHNA MOVEMENT IN AMERICA

“You scientists, you say some jugglery of words: proton, atoms, this, that,
and hydrogen, phoxygen, oxygen. But what benefit people will get?
Simply they’ll hear this jugglery of words. That’s all. What else you can
say?”

-- Swami A.C. Bhaktivedanta Prabhupada, recorded conversation

(April 28, 1973)

INTRODUCTION TO SECTION II

The merchant vessel pulled into Boston harbor to deposit its unusual passenger, an exotic charismatic public preacher hailing from foreign shores. Religious leaders John Winthrop, Ann Lee, and George Whitefield had tread the same ground, as had the native born Cotton Mather and Henry David Thoreau. The Indian *swami* (monk) A.C. Bhaktivedanta Prabhupada, who arrived by steamboat from Calcutta at 5:30 AM on September 17, 1965, had a similar mission: to introduce what to America was a new religious perspective, and to create a model religious community. No less so than Winthrop, who so famously declared the Puritan intention of founding “a city upon a hill” for the whole world to see, Bhaktivedanta hoped to establish in America an ideal religious society, albeit one predicated on Hinduism rather than Christianity. Like Whitefield, the Indian swami traveled from city to city spreading his gospel, speaking on streets, in theatres, and anywhere else he could attract crowds.¹ In doing so, Swami A.C. Bhaktivedanta Prabhupada founded the International Society for Krishna Consciousness, known to members and scholars by its acronym ISKCON and more popularly as the Hare Krishna movement.

Bhaktivedanta arrived in America with very few personal possessions. His suitcase contained changes of clothing, a letter of introduction to an Indian family in Pennsylvania, 40 rupees in Indian currency, dried grains for making his own vegetarian food, reading material, a diary, and an umbrella.² More importantly, as far as the swami was concerned, he brought two hundred three-volume sets of his own English-language

translation of the Indian devotional classic, the *Srimad Bhagavatam*, a central religious text in the Hindu sect that Bhaktivedanta followed. Besides his personal effects and the text he hoped to disseminate to American converts, Swami Bhaktivedanta carried one other item: a stack of five hundred single-page pamphlets to promote the *Bhagavatam* and his mission of spreading it. The pamphlet itself suggested the purpose of the Indian monk's mission. First, it described Bhaktivedanta himself and the book that he carried. With a large photo of A.C. Bhaktivedanta at its center, the pamphlet declared, "'Srimad Bhagwatam' [Bhagavatam] // India's Message of // Peace and Goodwill // Sixty Volumes of Elaborate English Version by // [photograph] // Tridandi Goswami A.C. Bhaktivedanta Swami." Next, it explained how the swami had arrived in America, in doing so fulfilling the additional role of reflecting Bhaktivedanta's sponsorship, namely the steamship company that had donated his room and board for the swami voyage's as well as paid for the printing of the pamphlet. In a large font, it declared, "Carried by the Scindia Steam Nav. Co., Limited // Bombay." Finally, the pamphlet explained why Swami A.C. Bhaktivedanta had traveled to America, and why he hoped to distribute his books in the United States: "All over the world for scientific knowledge of God."³ From his first moments in America, the founder of the Hare Krishna movement carried a physical statement on science, religion, and the relation between the two. ISKCON, its founder declared, possessed "scientific knowledge of God."

This pamphlet revealed a fundamental assumption of Swami A.C. Bhaktivedanta Prabhupada, one that shaped the religious movement that he founded: human beings could know God scientifically, and could teach this process to others. Bhaktivedanta insisted that anyone who investigated with an open mind would find a more perfect

explanation for human life and the universe itself in his Krishna Consciousness movement than in any other religious or scientific option. However, at other times he declared that the religion he brought to America, a sect of Hinduism known in India as Gaudiya Vaishnavism, itself represented a science. While at other moments Bhaktivedanta thundered against science as wrongheaded, immoral, and arrogant, all of these positions represented a single overarching view of science and religion in the Hare Krishna movement: that Western science had failed, and that a more religiously-attuned alternative, that proffered by the Hare Krishna movement itself, needed to replace it.

Within a year of arriving in the United States, the swami had created a small religious community in Manhattan, at first in borrowed space on the Upper West side of the city, and later in his own rented quarters in the more bohemian lower East Side. The exotic Hindu street preacher attracted crowds as he publicly chanted the *mantra* (meditative prayer) that his particular sect of Hinduism upheld as most central. The words of the mantra, “Hare Krishna, Hare Krishna, Krishna Krishna, Hare Hare, Hare Rama, Hare Rama, Rama Rama, Hare Hare” gave a name to the group of mostly countercultural followers who flocked around Bhaktivedanta. Before long the media paid attention to this new group of “Hare Krishnas,” as they had been dubbed. When reporter Jerry Erber of the small newsweekly *National Insider* asked followers of Bhaktivedanta if the Krishna Consciousness espoused by their International Society was a “religion, a cult, a philosophy, or what?,” they responded to him by not only equating their practice to science, but invoking scientific analogies and language. “Krishna Consciousness is not a religion but rather a science,” one explained. “According to this science we are samples of God.” Bhaktivedanta himself appealed to science in order to defend the legitimacy of

the group. When Erber asked if the small size of his following concerned him, the swami responded, “a science is a science no matter how many followers it has.”⁴

From its earliest days, observers, followers, and leader alike all understood the religion of the International Society for Krishna Consciousness with reference to science and scientific terminology. For example, the first mainstream publication to discover the Hare Krishnas, the *New York Times*, featured in its October 1966 the poet Alan Ginsberg, whom the *Times* cited as an authority on the group. Ginsberg, a spokesman for the counterculture, explained Bhaktivedanta’s religious teaching using both religious and scientific language, alluding to the biological changes that accompanied the chanting of the Hare Krishna *mantra*, or prayer. Ginsberg explained, “[i]t brings a state of ecstasy. For one thing, the syllables force yoga breath control; that’s one physiological explanation.”⁵ In this, the first mainstream publication on the Hare Krishna movement, a publicly recognized figure—though certainly not a scientist—employed explicitly scientific terminology, the “physiological explanation,” to explain a central ISKCON ritual.

Science and religion remained a central concern of Bhaktivedanta and his International Society for Krishna Consciousness. Through pamphlets, books, regular articles in the movement’s glossy magazine, speeches, and more ephemeral materials, Swami A.C. Bhaktivedanta and the American converts who became fellow devotees of the Indian God Krishna emphasized the place of science in their religious system. Like the Reverend Sun Myung Moon’s Unification Church, which preceded ISKCON in missionizing America, the Hare Krishnas understood themselves as possessing a scientifically-valid worldview that could hold up to any scientific scrutiny. Further, both

believed science supported their religious positions and contentions. Unlike the Unificationists, however, the Hare Krishnas took a very dim view of Western science and technology, openly and explicitly rejecting both Western science and America's science establishment as irredeemable and fatally flawed. ISKCON declared that it offered an alternative: an Indian, spiritual, textually-grounded, science that was neither Western, materialistic, nor empirical, yet nonetheless both more fully explained the world and better served humanity's moral and religious needs than conventional science. The Hare Krishna movement looked to their formulation of an alternative science in order to *replace* modern Western science and technology.

Note: This section makes use of a number of Sanskrit terms, all of which must be transliterated into roman characters. The leaders and members of ISKCON sometimes use variant transliterations of Sanskrit words, for example “Bagawatgita/Bhagavad-Gita” and “Krishna/Krsna.” While I have not changed direct quotations, I have provided a bracketed explanation when the transliteration of a Sanskrit term strongly varies from the conventional academic norm. In all cases I have avoided the use of diacritical marks, which are more likely to confuse than elucidate the reader untrained in Indology or philology.

¹ Bhaktivedanta arrived in Boston, passed through Customs and Immigration, spent two days there, and then continued on the ship to its final destination of New York City, where he began his mission in earnest. See Satsvarupa dasa Goswami, *Planting the Seed, New York City 1965-1966*, vol. 2, *Srila Prabhupada-Lilamrta: A Biography of His Divine Grace A.C. Bhaktivedanta Swami Prabhupada* (Los Angeles: Bhaktivedanta Book Trust, 1980), 4-7.

² See Satsvarupa dasa Goswami, *A Lifetime in Preparation, India 1966-1965*, vol. 1, *Srila Prabhupada-Lilamrta: A Biography of His Divine Grace A.C. Bhaktivedanta Swami Prabhupada* (Los Angeles: Bhaktivedanta Book Trust, 1980), 287. For more on A.C. Bhaktivedanta’s journey to America, see Satsvarupa dasa Goswami, *Planting the Seed*, 1-5.

³ Satsvarupa dasa Goswami, *A Lifetime in Preparation*, 173.

⁴ Jerry Erber, “New Indian Religion Sends You Higher Than LSD!: Secrets of Krishna Consciousness ” *The National Insider*, 23 April 1967, 11.

⁵ Ginsberg, as quoted in James R. Sikes, “Swami’s Flock Chants in Park to Find Ecstasy,” *New York Times*, 10 October 1960, 24.

CHAPTER 3: SCIENCE AND ISKCON BEFORE 1970

The Origins of ISKCON

The Hare Krishna movement, known more formally as the International Society for Krishna Consciousness (ISKCON), developed out of a preexistent Hindu devotional sect transplanted to the West. On the one hand, the group shared a theological base with a number of conventional Hindu religious groups, and its founder stood at the end of a verifiable lineage of spiritual teachers recognized by most Hindus as legitimate. Yet one cannot agree with Kim Knott, who asserts that “Hare Krishna is not a new religious group, except in the most superficial sense; it is not stuck in the cultural and social groove of the 1960s; nor is it just one of the many contemporary cults, and hence interchangeable with Divine Light, the Moonies, or the Rajneesh movement.”¹ Indeed, to declare ISKCON “interchangeable” with the Unification Church or other new religions that thrived in the 1960s and 1970s would be incorrect, as surely as each of those groups cannot be interchanged with another. This does not, however, mean that ISKCON is not a new religious movement. ISKCON represented something radically new: a Hindu devotional sect transplanted to, and transformed in, America, where it appealed primarily to Western converts and drew inspiration from—and simultaneously rejected—the postwar American, and subsequently Euro-American, counterculture.² Though equivalent in doctrine to the Gaudiya Vaishnava sect of Hinduism, ISKCON’s founder Bhaktivedanta innovated in how he introduced the religion to Americans and how he positioned it vis-à-vis the wider culture. The American Hare Krishna converts rejected

what they saw as the corrupt outside world and crafted a sectarian religious world for themselves, a hybrid culture drawing from Indian as well as countercultural norms. In constructing this hybrid worldview, the American devotees of Krishna turned to science and their view of it to define themselves and their movement.

Abhay Charan De and the Origin of the Hare Krishnas

Like the Reverend Sun Myung Moon, Bhaktivedanta's early exposure to industrialization and modernization shaped his later life, and he employed modern technological and technocratic methods in propagating and operating his religious society. However unlike Moon, the young Abhay Charan (A.C.) De, as Bhaktivedanta was known before adopting the religious life, did not embrace the idea of modernization and the Western scientific worldview behind it. At most willing to accept the modern scientific world as a tool for spreading his religious message, even before sailing to the Americas and leading a new religious movement, the future founder of the Hare Krishnas demonstrated ambivalence towards science and technology.

Born September 1, 1896, with the given name of Abhay Charan De, the future Hare Krishna founder witnessed half a century of British colonialism, and the rise of a modern and independent India. The child of high-caste middle-class parents in Calcutta, Abhay Charan De grew up literally across the street from a Hindu temple of the Gaudiya Vaishnava lineage, the variety of Hinduism professed by his parents and other members of his immediate family, and that later defined the theological moorings of the Hare Krishna movement. Biographical sources portray a religiously-centered child whose daily life revolved around home and temple worship activities dedicated to the Hindu god

Krishna, the central deity of Gaudiya Vaishnavism, and one of the most popularly worshipped Hindu gods.³ The official biography produced by ISKCON, which also serves as the most thorough source on the early life of Swami Bhaktivedanta, details his parents' successful efforts to inculcate religious devotion in their young son. By the age of six, Abhay had become an informal religious leader among his siblings and friends, gathering them for worship and even organizing a children's version of the eight day long religious festival Ratha-yatra. Though the biography, which tends towards the hagiographic, admits that Abhay mimicked the religious activities of the adults around him, clearly the boy had internalized the Hinduism of his parents.⁴

In addition to a foundation in traditional Hindu religiosity, Abhay Charan De's parents sought a modern Western style education for their child, turning to the British colonial educational system. Like Sun Myung Moon, who studied traditional Western subjects among Presbyterian missionaries, Abhay Charan De undertook his schooling under the guidance of Western Christian institutions, particularly the prestigious college operated by the Church of Scotland, the Scottish Church College of Calcutta, which he attended from 1916-1920.⁵ The college had a reputation for excellent scholarship, training students in Bengali and English culture, and as a center of Bengali intellectualism. Swami Vivekananda, the Hindu missionary who spoke at the Chicago Parliament of World's Religions, attended the college, as did Paramahansa Yogananda, another guru who spread Hinduism to the West. Swubhas Chandra Bose, the future president of the Indian National Congress and Indian military leader, attended Scottish Church College in the class ahead of Abhay.⁶ Though the college required study of the Christian Bible and theology, Christianity did not interest Abhay Charan De, whose

religious world his parents had bequeathed him. Though the future founder of ISKCON dutifully attended classes and studied the standard British colonial curriculum—British history, modern science, classical literature—he would come to reject it. Much of Abhay Charan De’s later work directly criticized the material that he learned at the Scottish Church College, rejecting Western culture, history, literature, and of course science as pale comparisons to what he considered India’s ancient glorious civilization. Though introduced to Western modernity, Abhay Charan De would not accept it.

Alongside internalizing Hindu religiosity and a Western education, during his childhood, adolescence, and college years Abhay Charan De also witnessed the modernization of India. British colonial administrators in the nineteenth century had already established an efficient technological infrastructure linking India’s major cities, but targeted most of their development towards entrenching their political and military dominance and transporting resources for export. What British governor-general Lord Dalhousie called “the three great engines of social improvement, which the sagacity and science of recent times had previously given to the Western nations—I mean Railways, uniform Postage, and the Electric Telegraph” successfully linked upper class Indians and British bureaucrats in Calcutta, Bombay, Madras and Delhi by the end of the 1850s.⁷ However, outside of these socially and geographically limited corridors of power, India remained a pre-modern society, at least when judged by Western notions of economic and scientific development. In his encyclopedic history of modern India, Claude Markovitz argues that “[u]p to 1905, modern Indian industry was more or less limited to the textile sector, both cotton and jute. From then onwards, partly under the influence of the *swadeshi* [nativist] movement, industrial diversification began to crystallize,

essentially through Indian initiatives. Cement factories, chemical factories, paper mills, all oriented towards the domestic market, emerged, but, in the absence of tariff protection, they often faced considerable difficulties.”⁸ During the dawning years of the twentieth century, India slowly emerged into the modern economic world. Abhay Charan De was right in the middle of it.

Abhay’s childhood coincided with the emergence of modern Indian economic and technological society. After decades of stagnation, in part due to global economic factors but primarily the product of colonial control, the Indian economy picked up during his first few years of life, peaking during his teen years (the early 1910s). Abhay witnessed the effective creation of a natively-operated (rather than colonially imposed) export market, at first mostly agricultural, with jute (a native Indian fiber), tea, and opium predominating. Economic figures show steep increases in all those products during the final decades of the nineteenth- and first decade and a half of the twentieth-centuries. The rate of construction and expansion of factories likewise rose, with 1913 witnessing the first domestic production of Indian steel from natively mined iron sources.⁹ Electricity and telegraph began to penetrate the countryside and the older areas of the cities, rather than merely the centers of colonial power. Of the changes wrought by the modernization of India, electricification personally impressed the young Abhay Charan De the most. Piecing together oral histories, interviews, and diaries, ISKCON biographer Satsvarupa dasa Goswami wrote of his movement’s founder:

Abhay turned ten the same year the rails were laid for the electric tram on Harrison Road [on which he lived]. He watched the workers lay the tracks, and when he first saw the trolley car’s rod touching the overhead wire, it amazed him. He daydreamed of getting a stick, touching the wire himself, and running along by electricity. Although electric power was new in Calcutta and not widespread (only the wealthy could afford it in their homes), along with the electric tram

came new electric streetlights—carbon-arc lamps—replacing the old gaslights. Abhay and his friends used to go down the street looking on the ground for the old, used carbon tips, which the maintenance man would leave behind.¹⁰

Although enamored as a child by the advent of electricity and modern technology, Abhay Charan De would later react against these very innovations, complaining that Western science and technology distracted from the religious or spiritual pursuits upon which he believed Indians and all people should base their lives. Just as he rejected the whigish notions of British civilization he learned at Scottish Church College, Abhay Charan De did not embrace Western technology or science. Tellingly, however, the place of science and technology reappeared throughout his religious writings, as he attempted to rectify the ideal of Indian Hindu religious centeredness and the reality of Western technological and scientific modernization.

In accordance with Bengali tradition, Abhay married a high caste woman whom his father selected for him, and a year after graduating from Scottish Church College started a family and a business career, becoming a part time pharmacist and manager for a small pharmaceutical company owned by a family friend.¹¹ Although a competent manager and chemist, questions of ultimate meaning concerned Abhay Charan De far more than business interests. While in college, he embraced Mahatma Gandhi's religiously inspired Indian nationalism, so much that Abhay adopted the simple handmade tunic that publicly declared him a follower of Gandhi, and later refused to participate in his own graduation ceremony as a protest against the colonial nature of his now alma matter, the Scottish Church College.¹² He had made his choice in favor of Indian culture, Indian values, and the Indian religion of Hinduism. Yet the ecumenical liberalism of Gandhi's movement failed to satisfy Abhay, who even as a Gandhian

showed a renewed interest in the religion of his childhood, the more conservative Gaudiya Vaishnavism of his family and the temple in whose shadow he had grown.

The religion that Abhay Charan De followed, and subsequently became the most influential exporter of, grew out of two sets of Hindu revivals, the first led by the sixteenth century Indian mystic Chaitanya, and the second the Bengali reformers of the nineteenth century, who worked under the influence of British colonialism. Gaudiya Vaishnavism's roots, however, derived from the traditional Hindu worship of the god Vishnu, who along with Shiva and Brahma compose the threefold godhead of Hinduism. The term *Vaishnavism* itself refers to the worship of Vishnu. (A *Vaishnava* or *Vaishnavite* is a person who worships Vishnu). Of these three major gods, Hindus most frequently worship Vishnu, whom tradition associates with guiding and preserving human society. A majority of Hindus believe that Vishnu periodically takes physical forms, what are called *avatars*, in order to guide and preserve human society. Such forms vary depending on the need of human society, but among Vishnu's avatars, Hindus most frequently venerate the cowherd prince Krishna (sometimes spelled "Krsna"), a slayer of demons and savior of villagers as well as friend and companion to the mortal Arjuna, a noble warrior facing the gruesome task of warring against his own kinfolk.

In keeping with their reading of Hindu sacred texts, Gaudiya Vaishnavism reverses the more common Hindu understanding of Krishna as an avatar of Vishnu, and proclaims that Krishna is the most intimate name and identity of the one true God who creates and sustains the universe, who then creates the triune godhead of Brahma, Vishnu, and Shiva (some schools within Vaishnavism explain that Krishna separates himself into the triune Godhead, rather than creating it *ex nihilo*), and then further

manifests himself in the form of avatars. Of the many avatars that Vishnu takes, Gaudiya Vaishnavism recognizes Krishna as most central, since only during that incarnation did the one true God manifest with his true name and personality. As Graham M. Schweig, a scholar of Gaudiya Vaishnavism as well as intellectual leader within the tradition writes, using the technical Sanskrit terminology, “within those Vaishnava traditions for whom the form of Krishna is considered the supreme and ultimate form of the divinity, he is both an *avatara* [avatar] and the *adi-purisha devata* (the original person of the godhead). He is the supremely intimate deity from whom the more powerful and cosmic forms emanate.”¹³ Krishna, therefore, is both the single cosmic God of the universe as well as a specific incarnation—the most important incarnation, at that—which God takes.

As one might guess, Gaudiya Vaishnavism understands itself as a monotheistic form of Hinduism, since it recognizes only Krishna as the supreme lord, albeit a lord who periodically incarnates himself on Earth in order to dispense compassion and wisdom to human beings. Gaudiya Vaishnavas such as the Hare Krishnas often point to the parallels with Trinitarian Christianity in order to explain their belief in a single God with several forms or names. According to this form of Vaishnavism, the various deities in the Hindu pantheon exist as demigods, created beings that Krishna employs for various tasks, a belief that some scholars note disqualifies ISKCON’s theology from pure monotheism. Schweg explains that Krishna “fills the cosmos with a stratified government of minor divinities working under his direction. He is often recognized as part of the triune cosmic godly powers: Brahma, the god of creation; Vishnu, the god of sustenance; and Shiva, the god of destruction. From the Vaishnava theological perspective, Brahma and Shiva, although extraordinarily powerful minor divinities within the complex cosmic

government, are not on an equal level with Vishnu.”¹⁴ Regardless, Gaudiya Vaishnavism maintains that only Krishna merits human worship. Singular devotion to Krishna, whom his worshippers consider the creator and sustainer and the entire cosmos, characterizes Gaudiya Vaishnavism.

Gaudiya Vaishnavism differentiates itself from other forms of Vaishnavism in a second way, its attachment to the Indian mystic reformer Chaitanya (1486-1533), understood by members of the Gaudiya sect as not merely a reformer, but an incarnation of Krishna himself. Chaitanya taught that the best form of worship is that of emotional or ecstatic devotion, particularly communal chanting and joyful singing of hymns and prayers. In this way, Chaitanya stressed the path of Hindu religiosity called *bhakti*, or devotion. Unlike some of the more intellectual forms of the religion, such as the disciplines of physical yoga, meditation, or study, *bhakti* appealed to a wider audience. Like the Jewish Chasidic movement or Protestant pietism, Chaitanya deemphasized social class, educational level, and intellectual sophistication, and subsequently brought his form of Vaishnavism to the uneducated masses. As Edward C. Dimock, Jr, the West’s premier scholar of Gaudiya Vaishnava history wrote, such *bhakti*-centered movements as Chaitanya’s “spoke to the people of the non-high culture, as well as those participants in the Sanskrit culture who for their own reasons were no longer satisfied with the rigid and highly formulaic religious system represented by brahmanism [Hindu orthodoxy].”¹⁵ Particularly, Chaitanya ignored the strictures of caste, preaching to mixed audiences and publicly declaring that all people could equally participate in the devotional *bhakti* worship.

Later commentators understood Chaitanya's mission in light of the Muslim dominance of Bengal.¹⁶ During Chaitanya's life, Islamic leaders criticized Hinduism's acceptance of caste restrictions as unjust, particularly when contrasted with the Muslim ideal of the *umma*, the Islamic holy community comprised of all people. Hindu reformers such as Chaitanya countered Muslim condemnation by deemphasizing caste and preaching more popular forms of Hindu devotionism. Chaitanya focused upon his birth tradition of Vaishnavism. His reform efforts succeeded to such an extent that during his own lifetime, followers began to see Chaitanya as a literal godsend, that is an incarnation of Vishnu sent to reform and reinvigorate religious devotions. The movement that he founded, taking its name from the geographical region of Gauda where he preached, became known as Gaudiya Vaishnavism, and unlike other forms of Vishnu-worship, envisioned its founder Chaitanya as an avatar. The singular piety to Krishna that Chaitanya demonstrated, which itself reflected Bengali popular religiosity and devotionism, also installed within Gaudiya Vaishnavism the doctrine of Krishna as the sole cosmic God, thus further differentiating the sect from other forms of Hindu Vaishnavism.¹⁷

Before it reached Abhay Charan De, Gaudiya Vaishnavism filtered through another era of reform, that of the nineteenth century Bengali reformers who reacted to both British colonialism and the modernization of India. Though reformers differed widely, they all agreed that Hinduism needed to adapt to the modern world, especially in light of their personal and collective exposure to British culture and religion. Further, they declared that a suitably modernized Hinduism equaled the Christianity of the British and other Western religions in terms of theological and philosophical sophistication. One

of the earliest of these Bengali reformers, Ram Mohan Roy (1772-1833), influenced by liberal Protestantism and the Hindu philosophical traditions, founded the Brahmo Samaj, which emphasized the non-personal monotheism of the Hindu sacred texts called the Upanishads.¹⁸ A subsequent wave of reformers, including Ramakrishna (1836-1886) and Swami Vivekananda (1863-1902) applied a more theistic or personal perspective, emphasizing worship of the supreme Goddess, Sakta, alongside philosophical introspection.¹⁹ Finally, reformers within Gaudiya Vaishnavism, namely Bhaktivinoda Thakur (1838-1914) and Abhay Charan De's own spiritual master, Bhaktisiddhanta Sarasvati (1874-1937) focused reform efforts on the worship of Krishna.

The reformists, particularly the charismatic monk Vivekananda, who forcefully defended Hinduism at the World's Parliament of Religions at the 1893 Chicago Worlds Fair, declared that modern Indians could look to their own religious heritage rather than turn to Christianity. Like Abhay Charan De, the reformers straddled the boundaries of East and West, often studying under missionaries or in Europe itself, and becoming fluent in Christian and Western philosophical concepts. Vivekananda himself graduated from the same Scottish Church College in Calcutta that Abhay Charan De would later attend. However, the reformers looked to India and Hinduism for their religious identities, encouraging Indians and Westerners alike to consider the religious and philosophical traditions of Hinduism as a font of religious knowledge. As Thomas J. Hopkins argues, "[b]oth symbolically and practically, these Western-educated intellectuals were affirming in the late nineteenth century a new message: that Hindus had little to learn from the West in terms of spirituality, whereas everyone—themselves included—had much to learn from Hindu spiritual masters."²⁰ In light of social, economic, and religious colonial

dominance, the Hindu reformers exerted Indian self-confidence and Hindu pride.²¹ ISKCON would do the same.

Abhay Charan De, who would become A.C. Bhaktivedanta and found ISKCON, traced his lineage to Bhaktisiddhanta Sarasvati and his father Bhaktivinoda Thakur, two leading lights of the Bengali reform movement as well as devotees of Gaudiya Vaishnavism. Bhaktivinoda Thakur served the British Raj as a professional magistrate but also produced nearly one hundred translations and commentaries on Gaudiya Vaishnava themes, with the intention, in Jan Brzezinski's words, "to rationalize Gaudiya Vaishnavism and bring it into the modern age."²² He set the pattern for his son and later Bhaktivedanta by focusing on translating Gaudiya Vaishnava sacred texts, producing written commentaries on the scriptures, and lecturing to mixed audiences, specifically those comprised of Hindus of multiple castes. Although one must treat with caution any declension themed narrative propagated by reformists, the scholarly consensus does indicate that the more egalitarian notions of Chaitanya had declined by the nineteenth century.²³ Bhaktivinoda Thakur and his son Bhaktisiddhanta Sarasvati set to reinvigorate Gaudiya Vaishnavism through not only appealing to its compatibility with modern modes of thought, but its openness to Hindus of the lower castes and stations. Like Chaitanya's efforts under the shadow of Muslim dominance, the latter-day Vaishnava reformers responded to Anglo-Christian criticisms of Hinduism as mired in the unjust Indian caste system. In 1911, while the young Abhay Charan De still attended secondary school, Bhaktisiddhanta published a booklet declaring caste effectively irrelevant, pronouncing that a person's caste depended on their actions and qualities rather than birth or their father's occupation, as Hindu society traditionally understood it.²⁴

Abhay met Bhaktisiddhanta in 1922, two years after graduating from college. Having lost a memorable debate with the elder Vaishnava, the young Abhay Charan De slowly returned to the religion of his childhood. Years after the fact, A.C Bhaktivedanta recalled of the experience, “I accepted him as my spiritual master immediately. Not officially, but in my heart.”²⁵ Abhay Charan De’s official recognition of Bhaktisiddhanta Sarasvati as his *guru*, or spiritual teacher, followed a decade later in 1932, when Abhay requested and received initiation as a householder (congregational member, as opposed to monastic) of the Gaudiya Vaishnava lineage. As a householder, his guru expected that Abhay would continue to support his wife and children, but would devote as much effort, energy, and expenses as possible to religious causes such as hosting visiting teachers, sponsoring the building of temples, and leading gatherings of other Vaishnavas for discussion and study.

Abhay fulfilled these requirements, but also honed his skills at preaching. Unlike most of his fellow Gaudiya Vaishnavites, Abhay benefited from an education at Calcutta’s premier colonial college and spoke almost naturally in English as well as Bengali. In February 1935, he accepted the opportunity to speak to a small gathering of fellow disciples of Bhaktisiddhanta in honor of the guru’s birthday. Abhay spoke in English, reciting a poem of his own invention and a speech that critiqued Western material culture as a pale comparison to what he considered the traditional Vaishnava spirituality. He declared, “the darkness of the present age is not due to lack of material advancement, but that we have lost the clue to our spiritual advancement which is the prime necessity of human life and the criterion of the highest type of civilization. Throwing of bombs from aeroplanes is no advancement of civilization from the

primitive, uncivilized way of dropping big stones on the heads of the enemies from the tops of hills. ... [W]hile others were yet in the womb in historical oblivion, the sages of India had developed a different kind of civilization which enables us to know ourselves. They had discovered that we are not at all material entities, but that we are spiritual, permanent, and non-destructible servants of the Absolute.”²⁶ The trope of Indian spirituality versus Western materialism, of ancient Hindu truths against modern Western destruction would endure in Abhay’s work both before and after he founded the International Society for Krishna Consciousness.

Abhay’s fellow Vaishnava devotees responded enthusiastically to his message and rhetoric, leading the future ISKCON leader to publish the address in his guru’s periodical, *The Harmonist*. Bhaktisiddhanta apparently approved, and in a letter that he sent Abhay shortly before the elderly spiritual leader died, he charged Abhay with a specific missionary endeavor: the duty of spreading Gaudiya Vaishnava religion to English speakers. In a passage of a letter that Abhay considered his new vocational calling, Bhaktisiddhanta wrote, “I have every hope that you can turn yourself into a very good English preacher if you serve the mission to inculcate the novel impression of Lord Chaitanya’s teachings in the people in general as well as philosophers and religionists.”²⁷ This letter, along with an earlier instruction that he should use what funds he had to publish tracts and books in support of Vaishnava causes, led Abhay Charan De to immediately shifted his focus to translating central Gaudiya Vaishnava texts into English and publishing English language periodicals.

Science and Religion in Abhay Charan De's Early Material

Following his spiritual master's instructions, in February 1944, Abhay Charan De published in Calcutta the first issue of *Back to Godhead*, an English-language forty-two page juggernaut of a pamphlet. *Back to Godhead* contained ten articles, each either written by Abhay Charan De or his translations of materials produced by other members of the Gaudiya lineage. Abhay set the tenor of the periodical in its masthead, with the first and each subsequent issue declaring "Godhead is Light, Nescience is darkness. Where there is Godhead there is no Nescience." The word "nescience," which conveys a meaning of both agnosticism and ignorance, provides a key to understanding how Abhay Charan De and his *Back to Godhead* approached science. The light of Krishna, which Abhay frequently referred to as transcendental science, would dispel both skepticism and ignorance. According to Abhay, modern Western science, that is science based on empiricism and the study of the material universe, idolized skepticism and stymied itself in ignorance. Representing both types of nescience, materialistic science offered nothing to the modern world, *Back to Godhead* insisted.

Each of Abhay's articles in the first issue of *Back to Godhead* directly confronted science and its relation to religion, an appropriate symmetry since the final article in the final issue of the Indian run of the periodical also discussed science. The roots of the sectarian approach to science demonstrated by the American Hare Krishnas existed inchoate in even these early sources, as evidenced by approaches to science in Abhay Charan De's first articles: a rejection of Western-style materialistic science as futile and impotent, and simultaneously a conviction that his own Gaudiya Vaishnava movement

offered a scientific solution to the world's problems. This mirrored the author's own rejection of Western modernity and simultaneous embracing of Hindu traditionalism.

The first position, the rejection of Western scientific materialism, emerged forcefully in each of the articles. He began by summarizing a passage from the Bhagavad-Gita, which had long served as the foremost scriptural source in Gaudiya Vaishnavism and many other forms of Hinduism, as well as fascinating Americans such as transcendentalist Henry David Thoreau. Abhay explained that "the soul or the spirit of the living entity is never born nor does it ever die. It was never created in the past nor it is created at present neither it shall be created in the future." Nearly every form of Hinduism, from the most universal and pantheistic to the personal and monotheistic, accepts such a position on the immortality of the spirit, making its appearance in his article rather unremarkable. Yet the future leader of the Hare Krishnas moved beyond the traditional ascription of the passage to demonstrate the eternality of the human soul to take a jab at the validity of modern science. Immediately after the passage, he provided an asterisk that pointed to a note at the bottom of the page. Without additional explanation, the footnote declared: "It is futile attempt therefore to produce life-substance in the laboratory of scientists."²⁸ One might view this negative assessment of science as standing out as apparently unrelated to the article itself, which considered issues of the soul and its relation to God. However, Abhay understood it as directly related: the Bhagavad-Gita and Vaishnava tradition preached one set of ideas about the soul and God, and scientists, particularly Western materialistic ones, preached a different set of ideas. This dualistic approach the science and religion would reappear throughout Abhay Charan De's work.

Abhay's next articles in the first issue of *Back to Godhead* provide the context to the author's earlier denigration of science. On the surface, the article titled "Theosophy Ends in Vaishnavism" encapsulated the author's critique of the nineteenth century Hindu-inspired religious movement Theosophy founded by H.P. Blavatsky and Henry Steel Olcott, which Abhay rejected as non-theistic and therefore erroneous. Within his critique, however, he turned to the issue of whether scientists and philosophers outside his own theistic Vaishnava tradition could discover the truths of God using differing methodologies. Abhay said no. He wrote, "God is Great and He reserves the right of not being exposed to the mundane speculationist and dry philosophers but He appears Himself by His own Will and Independence when He is offered transcendental loving services in all respects. The Sun appears in the morning just out of His own accord and not being bound up by the extraneous effort of the scientist. The scientist will fail to make appear the Sun at night by the discovery of all searchlights and scientific instruments."²⁹ This passage offered two arguments: first, those who used the wrong methodologies, i.e. mundane speculation and dry philosophy, could not understand the divine. Abhay De Charan would repeatedly employ those descriptions, "dry philosophy" and "mundane speculation," as descriptors of those who did not share his particular Gaudiya Vaishnava religious views, specifically those with less theistic understandings of religion ("dry philosophy") or those who worked purely in materialistic or empirical science ("mundane speculation").³⁰ In neither case could the practitioners of these methodologies grasp the truths of the divine, Bhaktivedanta insisted. Second, science was impotent, or in his own words, "extraneous." Scientific instruments, machines, and theorems could not cause the sun to appear. The sun, like all parts of nature, transcended

the abilities of science. This second argument, that of science's futility, encapsulated the specific case of the first, namely that science could not study the divine. They combined to indicate that those who seek knowledge of the underlying truths of the natural world ought to consider non-scientific alternatives. As he wrote in the subsequent article, the scientist is "befooled in his tiny efforts to conquer the laws of Nature ... [which] can smash the products of such millions and billions of combined brains by her one stroke of the powerful trident."³¹

Despite such negative assessments of science, the future founder of the Hare Krishnas insisted in his articles in the first issue of *Back to Godhead* that the Krishna-based religion of Gaudiya Vaishnavism was scientific, a position which most clearly emerged in the article, "The Science of Congregational Chanting of the Name of the Lord." This article demonstrated Abhay's frequent use of science as an adjective that applies to something else, namely the theology and practices of Gaudiya Vaishnavism. "Lord Chaitanya," he wrote, "has most reasonably and scientifically ordered us to chant the Name of the Lord as follows."³² Or, as in an advertisement on the back cover of the magazine for his own translation of the Bhagavad-Gita, he declared the text an "elaborate exposition of the world famous Hindu Philosophy — 'The Bhagwat Geeta' — in its true, scientific, theistic interpretations."³³ In such cases the author never defined "science," but rather used it as a parallel description to "reasonable" or "true," in effect accepting one of the wider understandings of science, that it is rational, truthful knowledge. In this approach to science, even when the word appeared as a grammatical noun it describes another concept. For example, Abhay Charan De wrote that "all people must be led to the Science of *Samkirtan* [group chanting] by all means and they shall be engaged in the

culture of the science by *Samkirtan* only.”³⁴ The very name of the article, “The Science of Congregational Chanting of the Name of the Lord,” indicated this position. Here “science” meant something like a method or approach, though certainly not one based on materialism, empiricism, or positivism, three of the more common methodological assumptions of modern science. Abhay equated science and the practice of Gaudiya Vaishnavism.

Over the next sixteen years, until April 1960, Abhay Charan De would publish *Back to Godhead* as the English language organ of Gaudiya Vaishnavism in India (Abhay hoped to distribute to Britain and the United States but was unable to do so). Of the more than two dozen issues during this period, nearly every one considered science and its relation to the Krishna-based religion of Gaudiya Vaishnavism. Of the articles that discuss science, most disparaged it.³⁵ Like Western civilization more broadly, Abhay Charan De considered Western science a poor comparison to India’s native culture and intellectual achievements. In various articles, Abhay called science and scientific thinking futile, incorrect, useless, dangerous, wasteful, illusionary, and amoral. One typical criticism of science contrasted it with “transcendental modes of thinking,” which the article equated to the religion of the Bhagavad-Gita and Krishna. “Modern scientific thought is basically wrong, because such thoughts are products of the changing mind a subtle form of material elements. Transcendental modes of thinking is [sic] basically right because it emanates from the realm of eternal spirit or the deeper aspect of human personality,” he explained in an April 1956 article.³⁶ In other articles, he implied that science operated immorally, as in the article “Definition of Vice & Its Scope,” where Abhay wrote: “so-called scientific knowledge of the mundane scientist are different

varieties of illusions only to bewilder from spiritual on the conditioned souls [*sic*] who have fallen from the pure state of existence ... The so-called scientific knowledge is prompted by a desire to lord it over the material nature which is the root cause of all vices as described above.”³⁷ Abhay Charan De taught that materialism of any variety, scientific materialism included, distracted from the spiritual ambitions of life as taught by Gaudiya Vaishnavism.

Yet while he blasted science as illusionary, immoral, and wrongheaded, Abhay also insisted that Gaudiya Vaishnavism represented an alternative science. As already noted, at times Abhay did not explain what he meant by science, allowing the word to function as a descriptor of something else. By this “adjectival” or rhetorical use of science, Abhay cast Gaudiya Vaishnavism as scientific without specifying what precisely the term science meant, or why Vaishnavism merited consideration as one. For example, the future ISKCON founder wrote in the article, “Who is a Sadhu?” (*sadhu* means “saint”), “[t]he Sadhu is a pure devotee of the Lord and he may not be a mendicant by dress. He knows the Supreme Truth scientifically. And he disseminates this transcendental knowledge to all out of his causeless mercy upon them.”³⁸ No where else in the article did Abhay explain what scientific knowledge of truth might entail. The concept of science operated as a modifier or adjective only, describing Gaudiya Vaishnavism.

Abhay Charan De no doubt spoke of science because he honestly believed that Gaudiya Vaishnavism was scientific. The future ISKCON founder did not attempt to define the term or explain why a potential adherent ought to consider the Krishna religion a science. Rather, Abhay invoked the cultural power of science, its aura of legitimacy

and authority, especially vis-à-vis other forms of knowledge. Thus in describing the periodical of *Back to Godhead* itself, Abhay explained that “[i]t is not blind religious fanaticism neither it is [*sic*] a revolt of an upstart but it is scientific approach to the matter of our eternal necessity in relation with the Absolute Personality of Godhead.”³⁹ Again, he did not explain what a scientific approach entailed or why *Back to Godhead* represented such methods. He did, however, contrast what he saw as the science of his journal, and hence Gaudiya Vaishnavism, with “religious fanaticism” and upstart revolutionary movements. Whatever science involved, it was neither fanatical or new, but conventional and recognized, i.e. legitimate. The magazine represented science because, Abhay seemed to insist, Gaudiya Vaishnavism also was legitimate.⁴⁰

Easy Journey to Other Planets

At the same time that Abhay Charan De began to focus on publishing his *Back to Godhead*, he decided to pursue the religious vocation fulltime. On September 17, 1959 Abhay took initiation into the Hindu monastic orders (*sanyasi*) and became known as Swami (“monk”) A.C. Bhaktivedanta.⁴¹ Becoming a *sanyasi* permitted the new A.C. Bhaktivedanta to leave behind his family so as to dedicate himself to the religious mission, an act that those within patriarchal Indian cultural norms considered a higher calling than family life. (Western devotees of ISKCON continue to debate this practice, especially since many Vaishnava males, like Bhaktivedanta, impose this decision on their families without either their spouse’s consent or input.)⁴² Freed of the social obligation to provide for wife and children, the new swami dedicated himself to writing and the dissemination of his work. In addition to his continuing work on *Back to Godhead* and

translation of pivotal Gaudiya scriptures from Bengali and Sanskrit into English, Bhaktivedanta né Abhay Charan De composed a short book that portrayed Gaudiya Vaishnavism as an alternative science. Titled *Easy Journey to Other Planets*, the book described Gaudiya religion as a spiritual science that offered more value than its materialistic counterpart, and was written in response to the sudden increase in astronomy, exploration of the solar system, and space travel that immediately followed the launch of *Sputnik*, the Soviet satellite that in 1957 became the first human-constructed object to orbit the Earth. Unable to secure funds to print the book itself, Bhaktivedanta published sections of it as two installments in the February 20 and April 5, 1960 issues of *Back to Godhead*, though he later managed to print it as a booklet as well.⁴³ A.C. Bhaktivedanta and later ISKCON's editors revised the book several times, reissuing it in 1970 and 1972 with numerous changes and additions.⁴⁴ From its first iteration, however, *Easy Journey to Other Planets* represented the obverse of Bhaktivedanta's rejection of Western science. If the science practiced in the West and by Western-oriented Indians represented wrongheadedness, then the science that his own movement promulgated, a spiritually-oriented science, offered the light of knowledge. "Godhead is Light, Nescience is darkness. Where there is Godhead there is no Nescience," trumpeted the masthead of each of *Back to Godhead*'s issues. *Easy Journey to Other Planets* explained the meaning of the masthead's slogan, providing the specifics of the spiritual or transcendental science, rather than leave it to function as a modifier of other concepts.

The first installment, "Anti-Material World or the Kingdom of Godhead Now recognized by progressive science," which later became the first chapter of *Easy Journey*, began on a mixed note. "Modern materialistic science has discovered [an] anti-material

world which was so long unknown to the wranglers of gross-materialism.”⁴⁵ On the one hand, scientists had achieved a remarkable discovery to which Bhaktivedanta granted them credit, but on the other hand the scientific endeavor remained that of wrangling over gross material, hardly a compliment to scientific methodologies or subject matters. The article continued by quoting a news article from the *Times of India* which explained that two American scientists had recently received the Nobel Prize for discovering the antiproton. In a phrasing that Bhaktivedanta would seize upon as the foundation of his article and book, the *Times* reported “According to one of the fundamental assumptions of the new theory, there may exist another world or an antiworld built up of anti-matter. This anti (material) world would consist of atoms and sub-atoms particles [*sic*] spinning in reverse-orbits to those of the world we know. If these two worlds would ever clash, they would both be annihilated in one blinding flash.”⁴⁶

The article’s description of anti-matter followed the scientific thinking of the day, including its speculation of possible anti-worlds. Scientists in the 1930s had discovered anti-electrons, or positrons, and the work on antiprotons followed in a similar vein. The mutual destruction of antimatter and matter likewise had been conclusively demonstrated by the 1950s.⁴⁷ By the late twentieth century, the use of antimatter became routine—most hospitals by the end of millennium used antimatter based Positron Emission Topography machines, or PET scanners, as diagnostic tools, and every major sub-atomic physics research station created and destroyed antimatter as part of their routine experiments. However, during the 1950s antimatter was new and unknown. Scientists and science fiction authors alike wondered what qualities antimatter might possess and what its reality might show about the universe. They conjectured alternative

universes and antimatter worlds, topics which fifty years later fell on the boundary of mainstream science and science fiction. Swami Bhaktivedanta seized upon the scientific discovery of the anti-material world as an analogous concept to the Gaudiya Vaishnava belief in the non-material world, or spiritual world, in which Krishna lives, from which souls emerge, and to which they eventually return. “Exactly like the material atoms, the anti-material atoms also create the anti-material world with all its paraphernalia ... Everything there is a living principle and the Supreme Personality in that region, of anti-material world is God Himself.”⁴⁸

The swami and future founder of ISKCON developed several arguments in response to what he considered the discovery by Western materialistic scientists of the spiritual world. First, what science had only lately and imperfectly discovered, Gaudiya Vaishnava tradition and scriptures had revealed centuries or even eons ago. Second, where science and his own religion disagreed, science was incorrect. Third, the Krishna-centered Gaudiya Vaishnava religion tendered an alternative spiritual or theistic science that offered vastly more and better knowledge. Lurking behind these arguments, the author challenged but implicitly recognized the tremendous legitimacy and power of science and the modern scientific establishment.

Although Bhaktivedanta applauded the scientific discovery of anti-matter and its conjecture of an anti-material world, he insisted that the scientific breakthrough merely confirmed what Gaudiya Vaishnavism and its sacred texts had long upheld as truth. In a representative statement, he wrote that “[t]he scientists have discovered that there are two forms of matter but the same thing is described more perfectly in the Bhagwat Geeta [Bhagavad-Gita] as two forms of energy.”⁴⁹ Hindu religious beliefs about the nature of

the universe offered two advantages over modern scientific ones, Bhaktivedanta explained: they more completely, or perfectly, described reality, and they predated the scientific discoveries. The author spent much of the first installment of *Easy Journey* explaining this more perfect understanding. The anti-material force, he wrote, exists within material bodies and possesses qualities of eternality, indestructibility, sentience, and the ability to transcend the material world. Science might one day discover these same qualities of antimatter, but Vaishnava tradition could explain them now. Further, his tradition had recognized the existence of antimatter and the anti-material world long before modern science did—in fact before modern science existed at all.

Bhaktivedanta rooted his defense of the antiquity of Vaishnava knowledge in his assessment of the Vedas, the ancient scriptures that form the historical and religious basis of Hinduism. Scholars and Hindus disagree amongst themselves over what texts comprise the Vedas, with a minimalist camp of academics and practitioners accepting only the oldest texts, while another camp permits the commentaries, expansions, and devotional texts which followed in the Vedic tradition. Many Hindus consider the Vedas timeless truths, and scholars have failed to reach a consensus on their dating. Most scholars date the Vedas as four thousand years old (composed around 2000 BCE) for the oldest texts in the collection, to as recent as 500 BCE for the newer texts. Other scholars see the Vedas as possibly twice as old, reaching into the Indian Bronze Age or even earlier as an oral tradition.⁵⁰ Gaudiya Vaishnavism envisions its sacred texts as older still, and therefore sees itself as the bearer of scientific truths that date back eons. Hence, Bhaktivedanta explained in the “Anti-Material World” article of the *Easy Journey* text:

Long long before the discovery of the principles of anti-matter particles or the anti-matter world, the subject matter was delineated in the pages of the

Bhagwat Geeta [and] the principles of the Bhagwat Geeta was spoken by the Personality of Godhead long long before or at least 400,000,000 forty scores of year before. Modern science has just very late discovered partial truth inculcated in the Bhagwat Geeta.⁵¹

Modern scientists might have discovered some limited knowledge of antimatter, but the Vaishnava tradition not only had more perfect data, but older data as well, in the Vedas and other scriptural sources. In America, ISKCON would build its alternative science on just this Vedic foundation, envisioning itself as offering a science predicated on ancient Vedic truths that predated anything Western materialistic science might offer.

Bhaktivedanta stressed a second point in the article, that when science and religion disagreed, particularly when science and Vaishnava religion disagreed, science must cede its ground. He specifically rejected the theory that if the antimaterial and material world clashed, “they both would be annihilated in one blinding flash,” as the *Times of India* article explained. More broadly, Bhaktivedanta disputed the finding that matter and anti-matter destroy one another on contact. The future ISKCON founder’s reasons for disputing the scientists depended on his reading of Vaishnava scriptures, namely the Bhagavad-Gita. He explained, quoting his own translation of the text, “We think therefore that the theory of annihilation of both the worlds is wrong in conception. This is further explained in the Bhagwat Geeta as follows: ‘The finest and immeasurable anti-material particle is always indestructible, permanent and eternal.’”⁵² The anti-material particles existed within human beings, he explained, and in fact their presence allowed bodies to become alive and grow. At the death of the body, the indestructible “anti-material particle leaves the unworkable old body and takes up another material body.”⁵³ Hence, antimatter neither appears nor disappears, not exists continuously and eternally. As evidence, Bhaktivedanta cited Vaishnava texts, indicating that since the

scientific notion of the destructibility of antimatter clearly conflicted with scriptural authorities, the scientists' position was erroneous. "Full details of the anti-material world can be known only from the infallible sources of liberated authority," he explained, meaning either a guru or one of the Vaishnava sacred texts. Since the texts indicated that antimatter must exist eternally, science must cede this fact as established.⁵⁴

One must note that Bhaktivedanta incorrectly understood the nature of antimatter, conflating the antiprotons and positrons that science discovered, both of which follow roughly analogous laws as normal protons and electrons, with the non-material elements of spirit or souls that his own tradition, and many other religions, upheld. Antiprotons do in fact annihilate themselves when they contact protons, and antimatter exists only ephemerally and unstably, since it quickly destructs when surrounded by the matter that makes up our known universe. Antimatter as defined by science does not naturally exist within human bodies and if it did in any measurable quantities, it would cause severe internal injury, as it would immediately annihilate itself along with an equal amount of matter. Bhaktivedanta had, after reading of the scientific discovery of anti-matter, equated it with the *jiva*, or non-material soul that Vedic sources declare immortal, eternal, and responsible, because it left a dying body for a new one during reincarnation.⁵⁵ The later editions of *Easy Journey to Other Planets* corrected Bhaktivedanta's oversight, noting that he could accept the notion that antimatter and matter destroyed one another "only within the limited scientific definition of antimatter."⁵⁶

Wishing to demonstrate that Gaudiya Vaishnavism offered an alternative spiritual or theistic science to modern science, Bhaktivedanta sought to directly compare the scientist's anti-matter to his own tradition's non-matter. He developed this argument of

Vaishnavism as an alternative science in greater depth in the second part of *Easy Journey to Other Planets*, published as “Variety of Planetary System” in the April 5, 1960 issue of *Back to Godhead*. But the first installment hinted at the representation of Gaudiya Vaishnavism as offering, or perhaps being, an alternative science to Western materialistic science. Referring to Vaishnava devotees as “students of theistic science,” he noted a difference in scientific methods. Whereas Western scientists prioritized their senses and experimentation, the theistic scientist “of this age gathers knowledge from the disciplic successional line of Arjuna [of the Bhagavad-Gita] so that without troubling himself in the matter of materialistic research work such transcendentalists acquire the truths of matters and anti-matters in the most perfect way and save time and botherations unlike the gross materialist.”⁵⁷ That is, Gaudiya Vaishnavism offered an alternative scientific method, one that rejected empiricism and instead emphasized study of the revealed truths of its own texts. Such an approach to science so obviously differed from mainstream Western science that it entailed replacing the latter with a new, Krishna-centered, science. In America, ISKCON would assume this position.

What the first article implied the second article stated outright: Gaudiya Vaishnava science, what the Hare Krishnas would later call “Vedic science,” must replace the mainstream science under which Western nations operated and the British colonials had brought to India. The article began by emphasizing the futility of science. Alluding to *Sputnik* and the newly inaugurated space race between the United States and the Soviet Union, Bhaktivedanta wrote that “the attempt to get into the orbit of the Moon, the Sun, or the Mars, as they are anxious to get into these particular planets, will be completely a futile endeavour of man on account of different atmosphere prevailing in

those planets which are described in the ‘Brahma Samhita’ as *Vibhuti Bhinnam* [variagated features].”⁵⁸ The Vedic scriptures describe the universe as containing innumerable, perhaps infinite planets, each of which contains a type of life most suitable to that planet, i.e. possessing variegated features appropriate to its habitat. On the basis of that information, Bhaktivedanta insisted that any human attempt to materially explore foreign planets would fail. Because human beings possessed Earth-specific features, our species must remain anchored to our own planet. “The sputnicks or the so-called man-made planets made of mechanical arrangements will never be able to carry human beings in the inter-planetary outer space,” he concluded on the basis of scriptural evidence.⁵⁹

Rather than pursue such futile explorations, Bhaktivedanta encouraged readers and scientists to accept what he elsewhere called “transcendental science,” i.e. Vedic science or the science of Gaudiya Vaishnava religion. In his other treatments of science in *Back to Godhead*, this science primarily existed as an adjective, describing forms of Vaishnava devotionalism or learning. In “Variety of Planetary System,” Bhaktivedanta specified what such a science entailed. Rather than laboratory or other material methods, transcendental science employed “yogic systems” as a means to gather knowledge. In fact, he described two yogic systems within this alternative science, the first a materialistic one that allowed yogis to project their consciousness to other planets, the second a devotional one that caused the soul to leave the body upon death and journey to one of the material or anti-material planets. He offered both as evidence of the Gaudiya Vaishnava alternative to modern science.

The first of these options, materialistic yoga, Bhaktivedanta reserved for materialists, i.e. scientists, who would like to personally explore other planets without

resorting to mechanical contrivances such as human-constructed satellites. He explained, “one can transfer himself in the other planets, not by means of playful sputniks which are simply childish entertainments but by psychological effects and learning the art of transferring the soul by mystic powers. The yoga system ... is a materialistic art of controlling such air which can be placed by practice of yoga from the stomach to the navel, from the chest to collarbones, from collarbones to the eyeballs and from the eyeballs to cerebellum. And from the cerebellum the expert yogi can convey his own soul to any planet he desires.”⁶⁰ (This is the yogic system to which Ginsberg alluded in the 1966 *New York Times* article.) Vastly simpler and cheaper than other forms of space exploration, Bhaktivedanta offered what he called the materialistic yogic system as an alternative approach to the scientific study of the cosmos, a more perfect and more ancient method, as he insisted in the first of the *Easy Journey* articles. After mastering the science of yogic travel, a person could visit as many material planets as one wished, including the Moon, the Sun, Mars, or the thousands of other inhabited planets that Bhaktivedanta proclaimed the Vedas described.

Yet “the best plan of life,” Bhaktivedanta insisted, “is to prepare oneself for going back definitely to the spiritual sky,” that is to engage in the non-material yoga of devotional service in an attempt to permanently journey to the non-material world of Krishna.⁶¹ Here the author linked the second of his articles to the first. Non-material (“anti-matter”) planets awaited in the non-material, or spiritual sky, which one might achieve through devotion to Krishna, the Supreme Personality, or God. At this point Bhaktivedanta proffered the ultimate alternative to Western science. Whereas the scientists who discovered the antiprotons focused exclusively on this-worldly

experiments and knowledge, transcendental science, as Bhaktivedanta called it, offered the chance to escape from the material world and, in the words of his periodical, go back to Godhead. He concluded his second installment of *Easy Journey to Other Planets* by explaining that the desire to journey to the non-material planets, “[w]hen such desires are conducted in relation with the Kingdom of God, is called divine or devotional service which is discussed also in this issue.”⁶² Turning the page, the reader could find Bhaktivedanta’s translation of a classic Gaudiya Vaishnava text, one that detailed the “transcendental science,” as the swami translated it, of Krishna’s earthly and heavenly activities.⁶³

Assessing as a whole Bhaktivedanta’s two part article series that derived from *Easy Journey to Other Planets*, the author clearly attempted to harness the cultural legitimacy and power of science in order to defend and promulgate Gaudiya Vaishnavism, a constant that reoccurred throughout the history of the Hare Krishna movement. Even while rejecting science as impotent, immoral, incorrect, or partial, Bhaktivedanta recognized that his readers appreciated science as progressive means of acquiring knowledge, one that colonial Indian culture, like the British society it emulated, accepted as legitimate and admired as factual and truthful. Each of the articles began with citations of modern, Western scientists. The first detailed the Nobel-winning American physicists’ work on antimatter, and the second directly quoted three Russian natural scientists, astronomer Boris Vorontsov-Veljanino, botanist Vladimir Alpatov, and chemist Nikolai Zhirov, all of whom Bhaktivedanta cited as “Dr.” Each of the quotes supported Bhaktivedanta’s argument that the cosmos contained millions of planets that supported different forms of life. Bhaktivedanta first cited as proof-texts, in other words,

not the Vedas or the Bhagavad-Gita, but quotes from members of the Russian Academy of Sciences, an institution then held in high international regard because of the success of the Soviet *Sputnik*. Only then, after establishing as scientifically legitimate the view of the existence of multiple life-bearing planets, did the future founder of ISKCON turn to his own sect's reasons for accepting these beliefs, namely its scriptural statements. The first article's use of scientific evidence in support of antimatter followed a similar pattern. Here Bhaktivedanta reversed what he had earlier declared the ideal methodology, that of rooting knowledge in scripture, because he recognized mainstream scientific evidence would more effectively convince his readers.

Bhaktivedanta's personal correspondences from the same time period support the contention that he simultaneously rejected mainstream Western science as well as clamored for its legitimacy and cultural power. Many of his letters include what I have called the "adjectival" use of science, in that he utilized the term only in describing something else. For example, in a 1947 letter that he sent to Raja Mohendra Pratap, a renowned Indian anti-colonial revolutionary who had only recently returned from exile, Bhaktivedanta scolded Pratap for his apparent "pantheism," as evidenced by his essay, "Religion of Love." The swami admonished, "you have not quoted any authority for all your statements ... the approach [to religion] shall be and must be authoritative, scientific and universal. Your delineations do not conform to all these necessary things. ... My basis of arguments will be Bhagavad-gita which is the most authoritative, scientific and universal."⁶⁴ Here, as in Bhaktivedanta's published work, science functioned as a description of a preferred methodology, specifically the use of scripture as the basis of knowledge. Similarly, in a letter composed to Sardal Patel, the Deputy Prime Minister of

India, ISKCON's founder offered to establish an "organized, scientific" system of exporting Indian spiritual wisdom to the rest of the world. Without explanation as to what he might mean, Bhaktivedanta insisted that he was "confident to organize this work in a scientific way if I am helped by the state."⁶⁵ Again, Bhaktivedanta utilized "science" rhetorically as a descriptor, in this case illustrating what he considered efficient, accurate, and valid methods of work.

Other correspondences reveal that A.C. Bhaktivedanta treated science as equivalent to Gaudiya Vaishnava religion, and sometimes Hinduism more broadly. In a remarkable July 1947 letter to the revered Indian leader Mohandas Gandhi, Bhaktivedanta encouraged the man called Mahatma, or "Great Soul," to eschew his unguided reading of Hindu scripture and dedicate himself to a "bona fide Guru," in order "to learn the science of Absolute Truth."⁶⁶ Here, Bhaktivedanta equated science with his own Gaudiya Vaishnava lineage, and implied that he would be willing to accept Mahatma Gandhi as a spiritual disciple. Bhaktivedanta scolded Gandhi for accepting too many Western ideas and failing to follow what the swami considered the most valid lineage of traditional Hinduism, i.e. Vaishnavism. Five years later, in a similar but more broadly pan-Hindu manner, Bhaktivedanta wrote to Gandhi's protégé Jawaharlal Nehru that, "Absolute Truth is described in the Vedic literatures as Sanatana or Eternal. And the philosophy or science which deals in such eternal subjects is described as Sanatana Dharma." (Sanatana Dharma is the term that many Indians, particularly those shaped by anti-colonialism, employed to refer to the religion of Hinduism.) Again, Bhaktivedanta treated science as synonymous with Hindu religion in its entirety, and just as in his

correspondance with Gandi, the swami admonished Nehru for replacing Indian cultural, social, and governance norms with those drawn from the West.

Nor did the swami confine such treatments to only his letters to India's political leaders. In an response (possibly a form letter of sorts) to an unnamed correspondent who wished to join Bhaktivedanta's religious association, the swami replied, "Dear Brother, I am in due receipt of your kind enquiry and I am glad that you wish to become a member of the League of Devotees for learning the science & techniques of Theism or spiritualism of the highest standard." Following this statement, Bhaktivedanta offered several pages of quite specific religious instruction, ranging from which prayers to recite to a discussion of the true "value of human life."⁶⁷ The science of theism, as the swami called it, clearly referred to Gaudiya Vaishnava methods and beliefs. Such a position entailed sectarianism as well, as evidenced in the swami's August 5, 1958 letter to Ratanshi Morarji Khatau, a leading supporter of a competing religious group that espoused a more philosophical and less personal view of divinity. After first insulting his rival (calling his school of thought "cheap and unscrupulous," and labeling Khatau himself a "mundane scholar with poor fund of knowledge"), and then disparaging the ancient sage who the competing group followed (saying Krishna sent him "for bewildering the atheist class of men in order to confound them to become more and more atheist and thus suffer perpetually within the threefold miserable conditions of the material nature"), Bhaktivedanta then declared that his own movement offered the true, scientific, alternative. "Instead of indulging in the organization of such unauthorized persons you may kindly learn the science from the authority and make your life enlightened and attain success of the boon of human form of life."⁶⁸ Here, Bhaktivedanta

contrasted a religion of a competing form of Hinduism with the “science of authority” that Gaudiya Vaishnavism promulgated. “Science” operated as a term of distinguishing good from bad knowledge, methods, and interpretations—that is, of establishing legitimacy.

Bhaktivedanta’s Mission to America and the Birth of ISKCON

In order to fulfill his guru’s instructions to spread Gaudiya Vaishnavism to English speakers, Swami A.C. Bhaktivedanta decided to travel to the world’s most populous English-speaking country and what had replaced Great Britain as the West’s superpower, the United States of America. Having arranged for free transport aboard a steamship, the swami arrived in America in 1965. There he quickly set to work spreading Gaudiya Vaishnava teachings in America’s most dense and populated metropolitan area, New York City. Finding the traditional churches, mainstream religious leaders, and intellectuals unreceptive to his message, the swami turned to the young men and women who mingled in the city parks and streets, the mainstays of the counterculture only then becoming popularly known as the hippies. As discussed in previous chapters, the counterculture positioned itself against the mainstays of American society, everything from consumer culture, to the ideals of higher education, American exceptionalism, the value of work, respect for government, and of course technological society. Historian Theodore Roszak, whose assessment of the counterculture did as much to define as chronicle it, emblemized the countercultural perspective of science and technology. In his *Making of a Counter Culture* (1969), he complained that “scientists and technicians enjoy the freedom—indeed they demand the freedom—to do

absolutely anything to which curiosity or a research contract draws them.” To shock the reader into agreement, Roszak followed his critique with an imagined list of American scientists’ ideal projects: creation of bird-baboon chimeras, synthesis of viruses for biological warfare, DNA research intended to allow parents to customize their children, and artificial intelligence computers that replicate not only human cultural endeavors but even “the mind of God.”⁶⁹ Scientific arrogance, Roszak charged, endangered everyone. Another critic, the Catholic theologian and activist Jacques Ellul, declared that technology and the scientific mindset “dehumanized” individuals and society, transforming people into servants of machine and technique.⁷⁰ Both Ellul and Roszak’s accusations reverberated within the sector of the counterculture that turned to new religions (such as ISKCON) as an alternative. As one young Hare Krishna convert lamented, ever since the industrial revolution, “[t]he machine was to be the new God, and the scientists the priests.”⁷¹

Among the hippies Bhaktivedanta found an audience willing and eager to reject the mainstays of American religion— Christianity and Judaism—and accept an Indian alternative. Bhaktivedanta’s rejection of Western science fused with both the counterculture’s rejection of science as well as its members’ distrust of traditional authority structures, resulting in a more strident opposition to the American scientific-technological society than the elder monk had demonstrated in his material produced in India. Consequently, the Hare Krishnas in America adopted a strongly anti-science position, openly rejecting Western science and calling for its replacement with an idealized Indian alternative, the Vedic science that Bhaktivedanta insisted offered older, more valuable, and more accurate knowledge. Here the American Hare Krishnas

amplified the same themes that their founder had expressed in India: Western, materialistic science had failed, and needed to be replaced. Despite this position, the converts to the Hare Krishna movement and their guru continued to lean on the legitimacy and respect of contemporary science. Hence the ISKCON devotee Hayagriva Das Brahmacharya could simultaneously attack the “mechanical chaos of the 20th century” triumph of science, declare the Vedic background of the Hare Krishnas the ideal supreme science, and approvingly quote world renowned Albert Einstein as a proponent of spirituality.⁷²

In the United States Bhaktivedanta continued translating Gaudiya Vaishnava sacred texts and authoring his own interpretations of them. But lecturing to potential converts and new disciples became his main pedagogical and religious practice. The distinction between what he called the Vedic science of Krishna consciousness and the materialistic science of the West occupied a premier place in his earliest lectures. One advantage of Vedic science, he insisted, was its populism. Following the lead of Chaitanya, the sixteenth century mystic reformer whom the Hare Krishnas consider an avatar form of Krishna himself, Bhaktivedanta insisted that anyone could learn the Vedic science. Here the Indian swami paralleled the counterculture’s disdain for formal education, perhaps hinting at why hippies so readily accepted his message. He explained in a September 13, 1966 lecture that “an ignorant person does not know of the science of God, but if he at least wants to hear of it, this is good. In fact, the Vedic literature is known as ‘Sruti,’ which means to learn by hearing. Spiritual science does not require a high education, nor a high intellect. Simply by hearing we can pass over the ocean of birth and death.”⁷³ Rejecting the need for a higher education, Bhaktivedanta both

accepted and reinforced the countercultural values of his audience. Additionally, he invested their preexisting opposition to the conventional American educational system with a religious explanation: the hippies who became Hare Krishnas continued to reject American high education, but now they did so with an additional, religious, rationale.

Bhaktivedanta continued the lecture by echoing another countercultural claim, that American materialism had failed its youth. “The atheists say that if we want to be happy we should get money so that we can have more food and material pleasures. However, in spite of all our material comforts and scientific advancements, we have not been able to stop the miseries of birth, death, old age, and disease.”⁷⁴ Aligning himself with the romanticist critique of consumerism and materialism, Bhaktivedanta fused an opposition to science with an attack on what he saw as atheism and the too-comfortable lifestyle of Americans. While the DuPont corporation declared in its contemporary advertising slogan, “better living through chemistry,” Bhaktivedanta insisted that the best of living came through Gaudiya Vaishnavism, rebranded in American as Krishna Consciousness, or more informally the Hare Krishna religion.

In keeping with the pattern he had established in the Indian issues of *Back to Godhead*, Bhaktivedanta also defined Krishna Consciousness as a science on its own terms. For example, in a 1966 lecture he insisted that “Bhagavad Gita is the science of God. In other scriptures, there is a concept of God. But, take this example: We can see that the flower is red, and the leaf is green. But a botanist will give you far more perfect and subtle knowledge. So, there is theoretical knowledge and practical knowledge. The science of God means that we should have, of course, knowledge of the Lord.”⁷⁵ The Hare Krishna approach offered a science of God because it more perfectly described God,

on both “theoretical” and “practical” levels. Or, as Bhaktivedanta bluntly declared in a January 1967 lecture, “The purpose of ISKCON is this: to understand the science of God.”⁷⁶ Here the swami returned to one of the central points he emphasized in India, that Krishna Consciousness né Gaudiya Vaishnavism offered an alternative science to that of the West. Although perhaps new to the ears of Americans, none of this differed from the points he had earlier emphasized during his work in India.

What did change, however, was the context in which Bhaktivedanta worked to spread Krishna consciousness. Rather than evangelizing to Indians enamored of Western science, he preached to Westerners enamored of Indian culture. Instead of countering the British colonial imposition of Western modernity, he spoke to American youth who also suspected the modern West and actively sought out an alternative. Bhaktivedanta therefore incorporated numerous Indian elements into his society, and Indian art, dress, and cuisine predominated in the International Society for Krishna Consciousness that he founded. This approach also appeared in Bhaktivedanta’s written work, for example his twelve-page article, “A Study in Mysticism,” published in the newly reconstituted *Back to Godhead*, now produced in America by the swami’s disciples. The article, subtitled “An explanation of the mystic techniques offered by the great Teachers of Vedic wisdom—and their value to contemporary man,” combined extensive use of Sanskrit, illustrations of *mandalas* (geometric designs used in meditation by Hindus and Buddhists), and language drawn from both Gaudiya Vaishnavism and the American counterculture. It also extensively invoked science and scientific metaphors. A single page, for example, criticized the American government for sending soldiers to die in

Vietnam, questioned the value of higher education, rejected the ideal of technology as panacea, and called for the study of a “higher science,” that of Krishna Consciousness.⁷⁷

Just as revealing, in a 1969 issue of *Back to Godhead* Bhaktivedanta used his purport (explanation) of the tenth verse of the short Hindu text Ishopanishad, part of the more widely known corpus called the Upanishads, as a forum for attacking the Western scientific and technological establishment. The verse itself read, “The wise have explained to us that one result is derived from the culture of knowledge, and it is said that a different result is obtained from the culture of nescience.” From this, Bhaktivedanta argued that “[o]ne should become a scientist or philosopher, and make research into spiritual knowledge—not material knowledge—recognizing that spiritual knowledge is permanent, whereas material knowledge ends with the death of the body.” True scientists, he explained, pursue spiritual aims. Tellingly, however, Bhaktivedanta did not explain what such aims might entail. Instead, he launched into an attack on the American system of higher education. “The universities are, so to speak, centers of nescience only, and therefore the scientists are busy discovering lethal weapons to wipe out the existence of other countries. University students today are not given instructions on the regulative principles of Brahmacharya, [i.e.] the spiritual process of life, nor do they have any faith in the respective scriptural injunctions.”⁷⁸ Four years after his arrival in the United States, the college-educated former pharmaceutical chemist Bhaktivedanta had adopted the anti-establishment message of the countercultural youth to whom he had preached. Adding to his earlier themes of rejecting modern Western science and declaring Vaishnava science as superior, Swami Bhaktivedanta now declared the institutions of

Western science, namely those of higher education, centers of ignorance and even, as he added in the same article, arrogance.⁷⁹

Bhaktivedanta's First Disciples on Science and ISKCON

As the decade of the 1960s came to a close, the Hare Krishnas strengthened their foothold in America and extended their reach to Britain and Germany as well. With temples in New York, San Francisco, Berkeley, Los Angeles, Boston, Montréal, Seattle, and an agricultural-residential commune in rural West Virginia, ISKCON had achieved a wide geographic spread. It had also become an establishment in the American counterculture, with its saffron-garbed devotees and its Hare Krishna mantra easily recognized by both the hippies and the commentators who remarked on this colorful countercultural new religious movement. During the 1970s, ISKCON would both continue to expand as well as institutionalize itself, with larger temples, a bureaucracy operated by the new converts, and an attempt to outreach to the “straighter” community outside the counterculture. Although one might expect the group’s approach to religion to moderate during this era, the opposite happened. With the publication of several book-length collections and the spotlight of the media on its founder and his followers, the Hare Krishnas explicitly and vociferously attacked what Americans considered “science” and insisted that they offered an ideal replacement.

Thirteen months after Bhaktivedanta arrived on American shores, he had managed to convert a small cadre of former hippies to Gaudiya Vaishnavism, which he had incorporated in America in 1966 as the International Society for Krishna Consciousness. Of the duties Bhaktivedanta assigned his followers, he charged them

with editing and publishing a new run of *Back to Godhead*, transformed from the irregularly published magazine of a Indian householder to the official organ of the International Society. Sensing the enormous value that their spiritual master placed on the written word and on publishing, many of Bhaktivedanta's most dedicated followers devoted themselves to writing and editing the journal. In producing the new American *Back to Godhead*, they fused their guru's religious teachings with their own intellectual and theological positions. To the Bhagavad Gita they added references to Tolkein and Whitman, LSD and marijuana. However a critical position on science remained a core part of many of the articles that the first generation of devotees produced. On the one hand, the converts accepted their mentor's insistence that ISKCON represented an alternative science. On the other hand, they brought a vitriolic distaste for the American scientific establishment, the "new priesthood" of a scientific elite, as Ralph E. Lapp wrote.⁸⁰

Two of Bhaktivedanta's new disciples, Hayagriva Das Brahmachary (né Howard Wheeler) and Rayarama Das Brahmachary (né Raymond Marais) took the reigns as editors and headlined the new American *Back to Godhead*, renumbered at volume 1, number 1.⁸¹ Hayagriva came to ISKCON with a masters degree in English from NYU and a fascination with Hinduism and Buddhism that he gained from his courses in religion as an undergraduate at the University of North Carolina, Chapel Hill. Transcendentalist American poetry fascinated him, and Hayagriva would later retire to the movement's Waldenesque rural West Virginia commune.⁸² Much less is known of Rayarama, who contributed as editor to Bhaktivedanta's first American translations of the Bhagavad-Gita but seemed to have left the movement after several years.⁸³ In the first

article of the new magazine, they wrote of the Hare Krishna movement as one rooted in science, and therefore irrefutably accurate. “True devotees of Krishna neither reason nor argue about Him. ‘He who replies to words of Doubt, Doth put the Light of knowledge out,’ wrote Blake. For the devotees, Krishna is an established fact. The devotees do, however, spread ‘Krishna-consciousness’ to others, to convince them of Krishna’s existence through the ‘science of devotion.’ Devotion to God is a ‘yoga,’ a science, and it is to teach this science that Swami Bhaktivedanta has come to America.”⁸⁴ Much of Hayagriva and Rayarama’s rhetoric directly mirrored that of their guru, for example the references to yoga as a science (cf. *Easy Journey to Other Planets*), but they tentatively added to the message with the cited—but hardly integrated—reference to the mystic and romantic poet William Blake (1757-1827), a favorite poet of the counterculture.

Although each of the succeeding issues of *Back to Godhead* at least mentioned science, with the second issue declaring the “publication devoted to promulgating bhaktiyoga, the science of God as expounded by Lord Sri Krishna in the Bhagavad-Gita,” the editors refrained from any extended discussion of science until the fifth issue.⁸⁵

That issue, printed in January 1967, featured a disparaging and extended attack authored by Hayagriva Das on university learning, teachers, and students alike. It represented the new stridently anti-science perspective—at least when defining “science” as Western and materialistic—of the American Hare Krishnas. In his “Krishna: The End of Knowledge,” Hayagriva declared that “[l]ike history, philosophy, and literature, science has only succeeded in implementing man with encumbrances that mainly serve to divert his energy.” Spiritual aims, the author insisted, ought to preoccupy human learning. Yet, concurring with both his spiritual master Bhaktivedanta and with the

countercultural critics of science and technology, Hayagriva launched into a critique that might charitably be called a diatribe:

Furthermore, science has principally helped man to destroy himself most effectively. In the realm, science has proved itself most helpful and progressive. Extermination. When God gave man gunpowder He knew the little bangs would grow into bigger and bigger ones. In this field, science is most adept. “They murder to dissect” is now a bland statement. Always what [American poet] Hart Crane called “the iron dealt cleavage,” iron, metal, science cutting flesh. It is a familiar story. Yet these madmen, masters of extermination, receive large financial grants from universities and foundations to further pursue the annihilation of the race. They are always trying to kill God, but God cannot be killed. Yet science, the pursuit of the firecracker, is considered knowledge. ... Although modern man places all his hopes in science, the wise know this to be the knowledge of the madhouse.⁸⁶

Beneath Hayagriva’s colloquialisms, the author explicated a clear criticism of science: the technology that originated out of it resulted in suffering. Over the next six pages, Hayagriva attacked the ignorance of scientists and academicians broadly (e.g. “Sociology is concerned with the dying and anthropology with the dead”) and of university knowledge. The alternative, he implied, lay in Krishna Consciousness, what elsewhere he and other members of ISKCON insisted was a bona-fide alternative science. Yet for this article, Hayagriva focused on criticism alone.

Hayagriva Das continued this theme in the next issue of *Back to Godhead*, with a twelve-page article titled “Doubt, Thy Name is Bondage,” devoted almost exclusively to criticizing Western science as a worthless endeavor. Much of the article repeated similar charges from the previous issue’s critique, but Hayagriva also offered a new charge, one aimed not at science itself, but the practitioners of the methodology. Calling scientists “recalcitrant children of darkness,” Hayagriva Das declared that “[v]ain men are trying to used their tiny brains to puncture a realm that can only be known through faith, devotion, and the grace of God. ... Thinking the physical, material universe the all-in-all, they set

about conquering it like children. ... The scientist never acknowledge that he automatically accepts so much on faith—his very breath, for example, that makes it possible for him to pursue science and the empirical path.”⁸⁷ Though Hayagriva certainly presented an extreme criticism, much of what he said, that scientists demonstrated arrogance and close-mindedness, reverberated not only with fellow members of the counterculture but with broader society. Hayagriva contrasted scientists with those who he considered more enlightened Westerners, the poets William Blake, Walt Whitman (1819-1892) and Hart Crane (1899-1932).

Nearly every subsequent issue of the first half decade of *Back to Godhead* featured some discussion of science by the first generation American Hare Krishna devotees. The pattern followed that set by Bhaktivedanta himself in the Indian run of the periodical, with the majority of cases using science as a term to describe something else that the Hare Krishnas supported (e.g. science of God-consciousness, science of controlling the mind, science of God, scientific writings of the great Hindu mystics, etc.⁸⁸), but with a large minority of articles critiquing science, technology, and the scientific mindset that predominated in the United States. In the latter cases, authors often combined both perspectives. Goursundar Das Adhikari’s (né Gary McElroy) “Just Like a Ghost,” published in the twentieth issue of the American *Back to Godhead* series, in autumn 1968, represents such a position.⁸⁹ Set between an article on Chaitanya by Bhaktivedanta and an article on the ultimate fruitlessness of both the war in Vietnam and the peace movement, Goursundar, an American-born convert who later became one of the movement’s main illustrators for *Back to Godhead* and after that a leader of ISKCON’s Hawaii temple, focused on a defense of the reality of ghosts, and the need to

“surrender at the Lotus Feet of Krishna” in order to prevent the possibility of becoming a ghost after death.⁹⁰ Within the piece, however, the author incorporated a commentary on the ignorance of modern science. Having opened with a description of the claimed haunting at the battlefields of the War of the Roses, Goursundar framed his article with a commentary on science’s inability or unwillingness to explain the hauntings. “All sorts of similarly ‘impossible’ events challenge the aloofness of our comfortable modern scholars and scientists,” he explained. “Unknown, unexplainable phenomena cover so much of the four dimensions with which science is busy that it is curious anyone can remain indifferent to them.” Continuing, Goursundar described similar hauntings at the home of German actress Elke Sommers, and the coach house of the New York’s first governor, George Clinton. He then shifted from narrative to commentary: “[t]housands of encounters of this nature have been reported, and it is far from rational to dismiss them simply by deprecating the character of the observer. The real basis for objection to their stories seems to be, in the final analysis, simple incompatibility with official modern scientific theory. Actually, so-called scientists themselves are cornered when pressed for sound explanations from their side.”⁹¹

Goursundar Das Adhikari dismissed science in several ways. Rhetorically, he implicitly challenged science through calling its approaches “official modern scientific theory” and its practitioners “so-called scientists.” In the same way that popular language distinguishes between the official and the actual (e.g. official policies vs. actual practices) or the so-called and the real (e.g. so-called actors vs. real actors), Goursundar contended that the Western scientific establishment lacked credibility and the privilege of being real, actual science. He followed this rhetorical implication with explicit argument two

sentences later, declaring that, in distinction, “essential, genuinely rational science aims at the liaison of self consciousness and eternal Truth.” Finally, the author made an epistemological argument against science, namely that it relied on assumptions and conjectures. “And we should recognize clearly the fact that materialism can be every bit as superstitious an act of faith as unsubstantiated spiritual and psychic phenomena.”⁹²

Here, Goursundar implicated normative materialistic science and paranormal investigation as equally mired in epistemological uncertainty, and though he did not make the connection, other Hare Krishna devotees extended the same argument to religion as well. Only the science of Krishna Consciousness differed. Or, as Goursundar’s coreligionist Nayana Bhiram Das Brahmachary declared elsewhere in the same issue of *Back to Godhead*, “because of the scientific presentation of spiritual knowledge characteristic of the Vedic literature, Krishna Consciousness also offers something [sic] new to people of the West.”⁹³ Ironically, the something new that ISKCON offered the West was something they declared to be quite old in the East.

¹ Kim Knott, *My Sweet Lord: The Hare Krishna Movement, New Religious Movements Series* (Wellingborough: Aquarian, 1986), 85.

² Hinduism had spread to America before, of course. Swami Vivekananda and Paramahansa Yogananda had each brought their teachings to America, yet neither practiced devotional Hinduism, as Bhaktivedanta did. Hence the Vedanta Society and the Self Realization Fellowship predated ISKCON, but the Hare Krishnas represented the first transplant of devotionalism, the most popular form of Hindu religiosity in India.

³ Few sources describe Abhay Charan De's childhood. Most of the early materials produced on ISKCON focused on sociological concerns and understood the Hare Krishna movement as one among many other new religious cults, hence the inattention to the Indian background to this Hindu sectarian group. While I concur that ISKCON is a new religious movement, its rootedness in the Indian colonial experience requires more scholarly attention. For details on Abhay's early life, see E. Burke Rochford, Jr., "Hare Krishna in America: Growth, Decline, and Accommodation," in *America's Alternative Religions*, ed. Timothy Miller (Albany: State University of New York Press, 1995), 10-11, Satsvarupa dasa Goswami, *A Lifetime in Preparation*, 2-7.

⁴ Satsvarupa dasa Goswami, *A Lifetime in Preparation*, 13-14.

⁵ Technically, Abhay Charan De did not graduate from Scottish Churches' College, since he joined his fellow classmates in refusing to accept their diplomas as part of a Gandhi-inspired anti-colonial protest. Thomas J. Hopkins, "The Social and Religious Background for Transmission of Gaudiya Vaisnavism to the West," in *Krishna Consciousness in the West*, ed. David G. Bromley and Larry D. Shinn (Lewisburg: Bucknell University Press, 1989), 49.

⁶ Satsvarupa dasa Goswami, *A Lifetime in Preparation*, 26.

⁷ Dalhousie, as quoted in Stanley A. Wolpert, *A New History of India* (New York: Oxford University Press, 2004), 226. For more on the Indian rail system, see Claude Markovits, *A History of Modern India, 1480-1950*, trans. Nisha George and Maggy Hendry (London: Anthem, 2002), 415-16, Wolpert, *A New History of India*, 225-29.

⁸ Markovits, *A History of Modern India, 1480-1950*, 439.

⁹ Ibid., 426-39.

¹⁰ Satsvarupa dasa Goswami, *A Lifetime in Preparation*, 16.

¹¹ For additional biographical data, see Hopkins, "The Social and Religious Background for Transmission of Gaudiya Vaisnavism to the West," 49-50, Knott, *My Sweet Lord*, 27-29, Larry D. Shinn, *The Dark Lord: Cult Images and the Hare Krishnas in America* (Philadelphia: Westminster Press, 1987), 34-39, Federico Squarcini and Eugenio Fizzotti,

Hare Krishna, ed. Massimo Introvigne, *Studies in Contemporary Religion* (Salt Lake City: Signature Books, 2004), 3-7.

¹² Satsvarupa dasa Goswami, *A Lifetime in Preparation*, 34-5.

¹³ Graham M. Schweig, "Krishna, the Intimate Deity," in *The Hare Krishna Movement: The Postcharismatic Fate of a Religious Transplant*, ed. Edwin Bryant and Maria Ekstrand (New York: Columbia University Press, 2004), 17.

¹⁴ *Ibid.*, 16.

¹⁵ Edward C. Dimock and Tony Kevin Stewart, *Caitanya Caritamrta of Krsnadasa Kaviraja: A Translation and Commentary by Edward C. Dimock, Jr.* (Cambridge: Harvard University Press, 1999), 5.

¹⁶ See, for example, Jan Brzezinski, "Charismatic Renewal and Institutionalization in the History of Gaudiya Vaishnavism and the Gaudiya Math," in *The Hare Krishna Movement: The Postcharismatic Fate of a Religious Transplant*, ed. Edwin Bryant and Maria Ekstrand (New York: Columbia University Press, 2004), 75, Dimock and Stewart, *Caitanya Caritamrta of Krsnadasa Kaviraja: A Translation and Commentary by Edward C. Dimock, Jr.*, 10-25.

¹⁷ The best work on Chaitanya is Edward C. Dimock's introduction to his translation of the sixteenth century hagiography, *Chaitanya Charitamrta*. See also the studies of Majumdar and Chakravarti. Dimock and Stewart, *Caitanya Caritamrta of Krsnadasa Kaviraja: A Translation and Commentary by Edward C. Dimock, Jr.*, Asoke Kumar Majumdar, *Caitanya, His Life and Doctrine: A Study in Vaisnavism* (Bombay: Bharatiya Vidya Bhavan, 1969), Chakravarti Ramakanta, *Vaisnavism in Bengal, 1486-1900* (Calcutta: Sanskrit Pustak Bhandar, 1985).

¹⁸ The best histories on the Brahmo Samaj are David Kopf, *The Brahmo Samaj and the Shaping of the Modern Indian Mind* (Princeton: Princeton University Press, 1979), M.C. Kotnala, *Raja Ram Mohun Roy and Indian Awakening* (New Delhi: Gitanjali Prakashan, 1975).

¹⁹ For details on Vivekananda and Ramakrishna, see Shamita Basu, *Religious Revivalism as Nationalist Discourse: Swami Vivekananda and New Hinduism in Nineteenth Century Bengal* (New York: Oxford University Press, 2002), Carl T. Jackson, *Vedanta for the West: The Ramakrishna Movement in the United States* (Bloomington: Indiana University Press, 1994), Amiya P. Sen, *Swami Vivekananda* (New York: Oxford University Press, 2000), Narasingha P Sil, *Ramakrishna Revisted: A New Biography* (Lanham, Md.: University Press of America, 1998). Jeffrey Kripal's examination of Ramkrishna's sexual identity and the place of eroticism in Hindu mysticism remains extremely controversial, but is also useful. Jeffrey J. Kripal, *Kali's Child: The Mystical and the Erotic in the Life and Teachings of Ramakrishna* (Chicago: The University of Chicago Press, 1998).

²⁰ Hopkins, “The Social and Religious Background for Transmission of Gaudiya Vaisnavism to the West,” 47.

²¹ For more on the Bengali Hindu reformers, see Amiya P. Sen, *Hindu Revivalism in Bengal, 1872-1905: Some Essays in Interpretation* (Delhi: Oxford University Press, 1993).

²² Brzezinski, “Charismatic Renewal and Institutionalization in the History of Gaudiya Vaishnavism and the Gaudiya Math,” 80, Paul H. Sherbow, “Bhaktivedanta Swami’s Preaching in the Context of Gaudiya Vaishnavism,” in *The Hare Krishna Movement: The Postcharismatic Fate of a Religious Transplant*, ed. Edwin Bryant and Maria Ekstrand (New York: Columbia University Press, 2004), 130.

²³ On this note, I am indebted to the work of Jan Brzezinski, who himself draws on the work of Hitesranjan Sanyal and his *Social Mobility in Bengal*. Colonial sources also indicate the lack of egalitarianism in Hindu society, though such accounts must be taken cautiously. See also Hopkins, “The Social and Religious Background for Transmission of Gaudiya Vaisnavism to the West,” 38-41.

²⁴ See Brzezinski, “Charismatic Renewal and Institutionalization in the History of Gaudiya Vaishnavism and the Gaudiya Math,” 82-4.

²⁵ A.C. Bhaktivedanta Swami Prabhupada, as quoted in Satsvarupa dasa Goswami, *A Lifetime in Preparation*, 43.

²⁶ Reprinted in *The Harmonist*, an Indian Gaudiya Vaishnava periodical, and subsequently in *Ibid.*, 84.

²⁷ Letter to from Swami Bhaktisiddanta Sarasvati to Abhay Charan De, December 1936, as reprinted in *Ibid.*, 93.

²⁸ A.C. Bhaktivedanta Swami, “Godhead and Potentialities,” *Back to Godhead*, February 1944, 5.

²⁹ A.C. Bhaktivedanta Swami, “Theosophy Ends in Vaishnavism,” *Back to Godhead*, February 1944, 15.

³⁰ A representative example of such phraseology is Abhay Charan De’s note on his article submission policy. He wrote: “Scientific and self realised thoughts on spiritual knowledge, will always be welcome for publication in the ‘Back to Godhead.’ Unauthorized sentiments or dry philosophical speculative imaginations will not be entertained.” A.C. Bhaktivedanta Swami, “Submissions Policy,” *Back to Godhead*, March 1956, 4.

³¹ A.C. Bhaktivedanta Swami, “The Science of Congregational Chanting of the Name of the Lord,” *Back to Godhead*, February 1944, 22.

³² Ibid., 20.

³³ A.C. Bhaktivedanta Swami, "Advertisement: Geetopanishad, by Abhay Charan De," *Back to Godhead*, February 1944, 36.

³⁴ Bhaktivedanta Swami, "The Science of Congregational Chanting of the Name of the Lord," 27.

³⁵ There are numerous examples. For example, Abhay wrote that "modern scientific and experimental thought" can never bring "real happiness to the human being," since the study of the material world was itself useless. (A.C. Bhaktivedanta Swami, "Lord Shri Chaitanya, His Welfare Activities (and His Teachings)," *Back to Godhead*, April 1956, 3.) Somewhat more colloquially, he declared that the "basic defect of the scientific mode of thinking, [like] any literature which is not derived from the authentic sources of Vedic literature, is considered as ordinary country news with no effect of actual knowledge. Such literatures are full of mistakes, irrelevancy, cheating, and imperfectness." (A.C. Bhaktivedanta Swami, "Lord Buddha," *Back to Godhead*, May 1956, 4.) See also A.C. Bhaktivedanta Swami, "As Essential Service," *Back to Godhead*, November 1956, 2, A.C. Bhaktivedanta Swami, "Back to Godhead," *Back to Godhead*, June 1956, 4, A.C. Bhaktivedanta Swami, "Progressive Ambition (and Unsatiated Lust)," *Back to Godhead*, October 1956, 2, A.C. Bhaktivedanta Swami, "Religion Pretentious and Religion Real (Religiosity Real and Apparent)," *Back to Godhead*, June 1956, 2, A.C. Bhaktivedanta Swami, "Shri Chaitanya Mahaprabhu (Lord Chaitanya & His Teachings)," *Back to Godhead*, June 1956, 3, A.C. Bhaktivedanta Swami, "Sri Ishopanishad," *Back to Godhead*, April 1960, 2-4, A.C. Bhaktivedanta Swami, "Standard Morality," *Back to Godhead*, November 1958, 3.

³⁶ A.C. Bhaktivedanta Swami, "All Compact in Thought," *Back to Godhead*, April 1956, 4.

³⁷ A.C. Bhaktivedanta Swami, "Definition of Vice & Its Scope," *Back to Godhead*, November 1956, 1-2.

³⁸ A.C. Bhaktivedanta Swami, "Who Is a Sadhu?," *Back to Godhead*, March 1956, 2.

³⁹ Bhaktivedanta Swami, "As Essential Service," 1.

⁴⁰ For two other examples of the use of science as rhetorical legitimation, see A.C. Bhaktivedanta Swami, "Sufferings on Humanity," *Back to Godhead*, May 1956, 1, A.C. Bhaktivedanta Swami, "The S.R.C. Catastrophe," *Back to Godhead*, March 1956, 2.

⁴¹ Technically, Abhay Charan De had changed names twice before. When he first accepted initiation into the Gaudiya Vaishnava lineage, his *guru* Bhaktisiddanta gave him the new name Abhay Charanaravinda De. In 1939, leaders of his sect bestowed the name of Bhaktivedanta ("master of devotional knowledge") upon him in recognition and honor of his missionary work hence, Abhay Charanaravinda Bhaktivedanta. In his final

initiation, he became a monk, or *swami*, therefore becoming known as A.C. Bhaktivedanta Swami. The swami's disciple often add the term "Prabhupada," a term applied in Vaishnava groups to one's spiritual master. In keeping with ISKCON standards, I have called Bhaktivedanta by his given name, Abhay Charan De, in my description of his history, activities, and publications up to his monastic initiation in 1959.

⁴² It is not my intent to involve myself in the debate over the *sanyasi* orders, though critics of the system correctly note that traditionally this social norm has allowed men wide freedoms while imposing an artificial state of "widowhood" onto women. Given Indian culture's negative view of widows, the effect of a male taking sanyasi is often profoundly negative for the monastic's family.

⁴³ A.C. Bhaktivedanta Swami, *Easy Journey to Other Planets* (Delhi: League of Devotees, 1960).

⁴⁴ A complete analysis and history of subsequent editions of this book would require extensive coverage. In the editions that Bhaktivedanta's American movement published, the text includes a new preface, extended material in both its chapters, and revisions to account for scientific errors in Bhaktivedanta's original treatment as well as new scientific discoveries. A.C. Bhaktivedanta Swami, *Easy Journey to Other Planets, by Practice of Supreme Yoga* (Boston: ISKCON Press, 1970), A.C. Bhaktivedanta Swami, *Easy Journey to Other Planets, by Practice of Supreme Yoga* (Los Angeles: Bhaktivedanta Book Trust, 1985), A.C. Bhaktivedanta Swami, *Easy Journey to Other Planets, by Practice of Supreme Yoga* (New York: Bhaktivedanta Book Trust, 1972).

⁴⁵ A.C. Bhaktivedanta Swami, "Anti-Material World or the Kingdom of Godhead," *Back to Godhead*, February 1960, 1.

⁴⁶ Ibid. It is unclear if Bhaktivedanta misquoted "sub-atoms" instead of "sub-atomic" or if he merely repeated the error from the original *Times of India* article.

⁴⁷ Norwood R. Hanson, *The Concept of the Positron* (Cambridge: Cambridge University Press, 1963), Daniel J. Kevles, *The Physicists: The History of a Scientific Community in Modern America* (Cambridge: Harvard University Press, 1995), 231-35.

⁴⁸ Bhaktivedanta Swami, "Anti-Material World or the Kingdom of Godhead," 3.

⁴⁹ Ibid., 1.

⁵⁰ Edwin Bryant has detailed the debate over Vedic dating both in his own book, Edwin Bryant, *The Quest for the Origins of Vedic Culture: The Indo-Aryan Migration Debate* (New York: Oxford University Press, 2001), and Edwin Bryant and Laurie L. Patton, eds., *The Indo-Aryan Controversy: Evidence and Inference in Indian History* (New York: Routledge, 2005).

⁵¹ Bhaktivedanta Swami, "Anti-Material World or the Kingdom of Godhead," 2-3.

⁵² Ibid., 2.

⁵³ Ibid., 1.

⁵⁴ Ibid., 3.

⁵⁵ Bhaktivedanta said as much in the article, when he wrote that anti-matter equated to the “superior form of energy” described by Hindu scriptures, which in turn he noted, was “called by the name ‘Jiva’ or the living force.” Ibid., 1.

⁵⁶ Bhaktivedanta Swami, *Easy Journey to Other Planets, by Practice of Supreme Yoga*, 2.

⁵⁷ A.C. Bhaktivedanta Swami, “Variety of Planetary Systems,” *Back to Godhead*, April 1960, 3.

⁵⁸ Ibid., 1.

⁵⁹ Ibid., 2.

⁶⁰ Ibid.

⁶¹ Ibid.

⁶² Ibid.

⁶³ A.C. Bhaktivedanta Swami, “Devotional Services,” *Back to Godhead*, April 1960, 4.

⁶⁴ A.C. Bhaktivedanta Swami, “Letter to Raja Mohendra Pratap, 13 July, 1947,” in *The Bhaktivedanta Vedabase (Version 2003.1)* (Sandy Ridge, N.C.: The Bhaktivedanta Archives, 2003).

⁶⁵ A.C. Bhaktivedanta Swami, “Letter to Sardar Patel, 28 February, 1949,” in *The Bhaktivedanta Vedabase (Version 2003.1)* (Sandy Ridge, N.C.: The Bhaktivedanta Archives, 2003).

⁶⁶ A.C. Bhaktivedanta Swami, “Letter to Mahatma Gandhi, 12 July, 1947,” in *The Bhaktivedanta Vedabase (Version 2003.1)* (Sandy Ridge, N.C.: The Bhaktivedanta Archives, 2003).

⁶⁷ A.C. Bhaktivedanta Swami, “Letter to an Unknown Correspondent, September 1955,” in *The Bhaktivedanta Vedabase (Version 2003.1)* (Sandy Ridge, N.C.: The Bhaktivedanta Archives, 2003).

⁶⁸ A.C. Bhaktivedanta Swami, “Letter to Ratanshi Morarji Khatau, 5 August, 1958,” in *The Bhaktivedanta Vedabase (Version 2003.1)* (Sandy Ridge, N.C.: The Bhaktivedanta Archives, 2003).

⁶⁹ Roszak, still alive as of my writing, has lived long enough to see some of his fears come alive. Theodore Roszak, *The Making of a Counter Culture: Reflections on the Technocratic Society and Its Youthful Opposition* (Garden City: Doubleday, 1969), 271-4.

⁷⁰ Jacques Ellul, *The Technological Society*, 1st American ed. (New York: Knopf, 1964).

⁷¹ Hayagriva Das Brahmachary, "Krishna Consciousness and American Poetry, Part IV," *Back to Godhead* 1, no. 13 (1967): 19.

⁷² *Ibid.*: 20.

⁷³ A.C. Bhaktivedanta Swami, "From the Lectures of Swami A.C. Bhaktivedanta," *Back to Godhead* 1, no. 2 (1966): 3.

⁷⁴ *Ibid.*

⁷⁵ A.C. Bhaktivedanta Swami, "From the Lectures of Swami A.C. Bhaktivedanta," *Back to Godhead* 1, no. 14 (1967): 5.

⁷⁶ *Ibid.*, no. 15: 10.

⁷⁷ A.C. Bhaktivedanta Swami, "A Study in Mysticism," *Back to Godhead* 1, no. 25 (1969): 14.

⁷⁸ A.C. Bhaktivedanta Swami, "Sri Ishopanisd," *Back to Godhead* 1, no. 22 (1969): 28-29.

⁷⁹ See, for example, Bhaktivedanta's insistence that "[o]ur sputnik drivers are very proud of their achievements, but they do not look to the Supreme Driver of these greater, more gigantic sputniks called planets." *Ibid.*: 29.

⁸⁰ Ralph Eugene Lapp, *The New Priesthood: The Scientific Elite and the Uses of Power*, 1st ed. (New York: Harper & Row, 1965).

⁸¹ The last issue of the Indian run of *Back to Godhead* was volume 4, number 1, published September 5, 1960. The first issue of the American run (1 no 1) appeared October 23, 1966. Until 1974, *Back to Godhead* continued as volume 1, with the final issue of 1974 published as number 68. Starting in January of 1975, *Back to Godhead* leaped to volume 10, and thereafter the editors advanced the volume number each calendar year.

⁸² Hayagriva's *Hare Krishna Explosion*, from which I gathered these biographical details, is out of print and not available through interlibrary loan. I therefore rely upon the digital version of the text provided in the Bhaktivedanta Archive's *Vedabase*. Hayagriva Das Brahmachary, "The Hare Krishna Explosion: The Birth of Krishna Consciousness in America, 1966-1969," in *The Bhaktivedanta Vedabase (Version 2003.1)* (Sandy Ridge, N.C.: The Bhaktivedanta Archives, 2003).

⁸³ Rayarama also co-signed one of ISKCON's incorporation documents, the "Constitution of Association." It is unclear what became of him once he left ISKCON.

⁸⁴ Hayagriva Das Brahmachary and Rayarama Das Brahmachary, "Back to Godhead," *Back to Godhead* 1, no. 1 (1966): 2.

⁸⁵ "Editorial," *Back to Godhead* 1, no. 2 (1966): 1.

⁸⁶ Hayagriva Das Brahmachary, "Krishna: The End of Knowledge," *Back to Godhead* 1, no. 5 (1967): 13-14.

⁸⁷ Hayagriva Das Brahmachary, "Doubt, Thy Name Is Bondage," *Back to Godhead* 1, no. 7 (1967): 13-14.

⁸⁸ "Advertisement: Two Essays," *Back to Godhead* 1, no. 17 (1968): 1, Hayagriva Das Brahmachary, "Krishna Consciousness in American Poetry," *Back to Godhead* 1, no. 12 (1967): 15, Rayarama Das Brahmachary, "The Transmigration of the Soul," *Back to Godhead* 1, no. 8 (1967): 16, Rayarama Das Brahmachary, "The Unconditioned State," *Back to Godhead* 1, no. 3 (1966): 19.

⁸⁹ Although the issue doesn't contain a date, it is the fifth of six issues published in 1968, and its opening editorial comments on the American election. Both indicate that ISKCON published this issue in the early autumn of 1968.

⁹⁰ Goursundar Das Adhikari, "Just Like a Ghost," *Back to Godhead* 1, no. 20 (1968): 19.

⁹¹ *Ibid.*: 18.

⁹² *Ibid.* Four years later in Hawaii, Goursundar gave a speech on "Vedic epistemology" wherein he explicated in greater depth the same themes present in the "Ghost" article. Goursundar's undated manuscript, "Ontological Primer," held in the special collections of the University of California, Santa Barbara likewise extend the same themes. Goursundar Das Adhikari, "An Ontological Primer," (Manuscript, produced by Banyan House Press, Honolulu, n.d., American Religions Collection, ARC Mss 1, Department of Special Collections, University Libraries, University of California, Santa Barbara, Goursundar Das Adhikari, *The Kauai Lecture, Delivered by Goursundar Das, 13 December 1972 in Lihue, Kauai, Hawaii* (n.p.: Bhaktivedanta Book Trust, 1973).

⁹³ Nayana Bhiran Das Brahmachary, "Parts and Parcels," *Back to Godhead* 1, no. 20 (1968): 5.

CHAPTER 4: SCIENCE AND ISKCON, 1970-1977

Swami Bhaktivedanta and Science

ISKCON grew extremely quickly under the guidance of the energetic swami and his American-born converts, and experienced its heyday in the United States during the mid 1970s, especially before 1977 when its founder and leader Swami A.C.

Bhaktivedanta died. The movement planted centers through the United States and later the globe, witnessed sizable numerical growth, founded a publishing division, and achieved notable publicity (not all of it good, of course). During this era the American-born converts began to assume the mantle of leadership within the movement, and a variety of voices proliferated. Though ISKCON spoke with the same perspective on some of its most central issues—the place of the *guru* (teacher), the centrality of *bhakti* (devotion), and the value of the Vedas—less uniformity existed on science. Some members of the Hare Krishnas reached out to American scientists and the scientific establishment, others attacked it, and still other ISKCON devotees considered science fundamentally irrelevant. Within these disparate voices, several patterns emerged. The Hare Krishna movement's general approach to science during the 1970s, the final decade of its founder's life, represented a more vocal and strident position than earlier, one firmly opposed to the dominant paradigms of Western science. At the same time, however, ISKCON renewed its attempt to legitimate itself and its positions through science. Both efforts operated under the umbrella attitude within ISKCON that the

movement itself possessed the best, truest, oldest, most perfect science, and that the group must take as its mission the need to supplant America's scientific establishment.

Much of the impetus behind ISKCON's engagement with science followed from its founder, Swami A.C. Bhaktivedanta Prabhupada. Like the ISKCON movement more broadly, during this era he made a concerted effort to delineate why the Hare Krishnas offered a better alternative scientific paradigm than that of normative American science. Therefore he both defended ISKCON as a science, and attacked Western science as in need of replacement. The swami's personal correspondences, lectures, and conversations continued to indicate these positions. Of the over thirteen hundred taped conversations between Bhaktivedanta and his disciples or news reporters, ISKCON's leader mentioned science or scientists over three thousand times, doing so in the majority of conversations. Likewise, he discussed science or scientists in hundreds of the lectures he presented to devotees and the public, over five hundred times during just his lectures on the *Bhagavad-Gita*.¹ He reserved his clearest discussion of science however for the numerous articles he published in ISKCON's official organ *Back to Godhead*, and a series of structured conversations on science with his students in 1973, published posthumously in 1979.

Swami A.C. Bhaktivedanta's articles illuminate most consistently his approach to science. Of the dozens of articles he contributed to *Back to Godhead*, he focused on science in nine of those he wrote between 1970 and his death in 1977.² The first of these, "An Ancient Science for Modern America," published in the seventh issue of 1970, was also the first of Bhaktivedanta's articles in the American run of *Back to Godhead* to invoke science in its title. The reigning motif of this article described ISKCON as more

scientific and therefore better than its two leading competitors: the material science of the West, and the unscientific religion of Christianity. Repeating the same critique that he had offered twenty-six years earlier in the first issue of *Back to Godhead*, Bhaktivedanta dismissed Western science as ultimately fruitless. Using technology as a metaphor, he explained that “[t]echnology is good, for technology has produced [the] microphone, but don’t forget the real technology of life, how to understand God, how to love God. That is real technology. The other technology will be finished as soon as this body is finished.”³ Material technology, like material science, represented impermanence and the worldly concerns of those trapped in material consciousness. Krishna consciousness, Bhaktivedanta insisted, transcended such mundane concerns. Devotion to God as taught by ISKCON, or *bhakti*, he declared the “highest technology,” eternal and absolute. Adopting a hierarchal educational metaphor that his college-aged readers could grasp, he explained that “those who are actually interested in the science of God will find ample opportunity in this Krsna consciousness movement ... This is a postgraduate study of higher consciousness or God consciousness.”⁴ Undergraduates might study mechanical engineering or biology, but ISKCON offered a Ph.D. in the Divine. (In 1970, ISKCON changed their transliteration standards, shifting from spelling “Krishna” to “Krsna.”)⁵

However, in a move that marked the author’s new orientation towards reaching American converts, he directed the main thrust of the article not against science, but Christianity, which the swami recognized as the movement’s greatest competitor. Bhaktivedanta bluntly declared the religion of Christianity inferior to Krishna Consciousness. Whereas he rooted Krishna Consciousness in the ancient sciences of India and portrayed it as a postgraduate education in higher consciousness, Bhaktivedanta

implied Christianity was far more remedial. “The Christian religion was taught in a different time,” he explained. “Now people are more advanced in education. And it was preached in a desert: the people were not very prosperous at that time. So they have some description of God. But *Vedanta* [the Vedic corpus] was compiled under different circumstances for a different audience and with a different view. *Vedanta* means to know God.” The circumstances of the Vedas, Bhaktivedanta explained, were “very nice,” “lofty,” and “not like nowadays,” instead characterized by the highest moral, scientific, and spiritual development. “We can hardly imagine what class of men was present at that time,” Bhaktivedanta summarized.⁶ Hence the swami concluded that Krishna Consciousness, with its roots in the Vedas, offered the most scientific approach to solving the problems of individuals and the world. Materialistic American science focused on the wrong problems, and Christianity “is not a complete science for modern America. But Krsna consciousness,” he insisted, “is complete.”⁷ The remainder of the article defended the Vedas as both ancient (152,650,000 years old) and complete, and explained the need for people to accept the Vaishnava approach to devotion, bhakti, in order to have a relationship with God. Bhaktivedanta ended the article by explaining “[t]his is the way, this Vedic knowledge which is Krsna consciousness. It is an ancient science which is eternally new. Modern America has reached a stage of civilization where it is ready to ask important questions. This science, as always, is ready with answers.”⁸

None of this, of course, represented a radical departure from Bhaktivedanta’s earlier statements on science. As Abhay Charan De, he had published that Krishna Consciousness represented the best in science and that modern people ought to accept it as such. However, Bhaktivedanta had now specialized the message for America. First,

he targeted both Christianity and material science as competitors, in effect recognizing the Christian assumptions and backgrounds of his potential converts. Whereas in India he had included the Quran and Bible as valid and valuable scriptures, in America he attempted to differentiate the Krishnas from their Christian competitors by disparaging the Bible as “nonsense scripture” and “manufactured.”⁹ Because he envisioned Christianity as a competitor, he devalued it and its scriptures. He also emphasized what he regarded as Christianity’s unscientific nature.

One reason for this is that Bhaktivedanta assumed that American society had a certain scientific nature, one to which he sought to appeal. America, he declared, boasted high technology and a scientific approach to life, as opposed to Indian civilization, which he characterized as essentially spiritual. “Indians are trying to imitate the Western technological, economic developments, but the people are not fit for that purpose. They are by nature Krsna conscious,” he explained. He proposed that Indians ought to remain Krishna Conscious and that Americans, who naturally oriented themselves towards science, could emulate the Indian example.¹⁰ Here the Indian swami reproduced a form of configuring Asia and its relation to the West that Edward Said termed Orientalism. Orientalism, Said explained, assumes and affirms a manichean distinction between Orient and Occident, configuring the two as polar opposites. Europeans looked to the Orient as “the other,” and saw it in all that they had rejected during the Enlightenment (irrationalism, stagnation, authoritarianism, emotionalism). Europe became Europe by differentiating itself from the Orient, argued Said, and continues to contrast itself with the oriental “other” in order to confirm its own superior identity.¹¹ Richard King extended Said’s argument to the specific realm of religion, demonstrating that European scholars

and other intellectuals used religion to create and sustain a division particularly between Europe and Asia. Focusing on India, King argued that British colonial administrators and later scholars envisioned India as the inverse of Europe. “Thus the West is liberal, egalitarian, secular and modern, whereas Indian culture is authoritarian, hierarchical, religious and traditional,” he explained. In the case of Western observers, King generalized, “the West has portrayed itself as superior in its possession of the former qualities while Indian culture has been seen as inferior in so far as it exhibits the latter.”¹² Religion separated the two societies, such Westerners declared, with the Occident segregating religion into the private and rational sphere where they insisted it belonged, and the Orient integrating its irrational and emotional religion into the whole of social life.

Bhaktivedanta accepted the Orientalist dualism of Western/scientific/secular vs. Indian/spiritual/religious, but reversed the conventional valuation of the manichean poles, insisting that the latter categories merited higher consideration than the former. Such Orientalist assumptions explain Bhaktivedanta’s attempt to repackage ISKCON as a science, since he envisioned the West as inherently scientific and India as inherently religious. If the West valued science, Bhaktivedanta and his movement would speak scientifically, but with the intent of bringing the spiritual heart of India, as they considered it, to the Occident. This position indicates why Bhaktivedanta continued to emphasize the scientific nature of ISKCON while simultaneously accepting and even amplifying the anti-scientific approaches that the countercultural members of ISKCON brought with them. He believed that Americans listened to and respected science and

consequently spoke to them in that language, even if the content of his message explicitly rejected American scientific norms.

Portraying Krishna Consciousness as a science while simultaneously rejecting the Western scientific establishment and norms characterized much of Bhaktivedanta's work in the United States. The swami's 1972 article "The Search for the Divine," demonstrated both those approaches. In it he insisted that his movement represented a legitimate science that deserved attention and even financial support from the government and cultural elites, as well as minimized the value and import of science. The article developed out of a conversation between Bhaktivedanta and Columbia instructor and graduate student of religion Paul Valliere. Questions of religion and science predominated much of their talk.¹³ Bhaktivedanta began the conversation by minimizing the abilities of Western science. "The other day we were talking with a scientist. We came to this conclusion: that the big scientists are simply observing the laws of nature. The laws of nature are very stringent. For example, there is death. Everyone will die. One cannot check death, however great a scientist he may be. By the laws of nature one becomes old. By scientific advancement they cannot stop this. ... The same failure is there."¹⁴ Scientists, Bhaktivedanta argued, could only describe nature, not affect it. Having prefigured scientists and Western science as impotent, a topic to which he would return toward the end of the conversation, Bhaktivedanta next described the "perfect knowledge" of the Vedas, and then the need for every person to accept a *guru*, or teacher, steeped in Vedic knowledge. Finally Bhaktivedanta returned to the idea of science. "So this is a very important scientific movement. I therefore request learned scholars like you—government officials, scientists, philosophers—to study this. It is for

them that we have written so many books. Not only that ... it is not that we are simply chanting and dancing. If you are a philosopher, if you are a scholar, if you are a scientist, we can give you food for thought in a scientific, philosophical, scholarly way. My only request is that all the leaders of society come forward, study this movement and take to it. That will be beneficial. We don't ask that they do so blindly, just as one follows some type of faith or religion blindly and after some time gives it up. No.”¹⁵

Within this brief statement, Bhaktivedanta attempted to defend the scientific nature of ISKCON in several ways. First, he argued that his movement emphasized literary study, not merely ecstatic dance and worship. Officials, scientists, and philosophers—occupations that correspond to the highest Hindu castes, Brahmins (intellectuals) and Kshatriyas (administrators)—would find in ISKCON a truly scholarly movement, he insisted. Further, and crucial to Bhaktivedanta's positioning of the Hare Krishna movement, ISKCON did not require “blind faith.” Instead, it offered (unspecified) direct benefits that any person could recognize. Unlike “some time of faith” that a person might follow, ISKCON provided evidence. Hence Bhaktivedanta insisted that “this Krsna consciousness movement is the genuine scientific movement which everyone should take.”¹⁶ Unlike other religions, its leader and founder insisted, ISKCON did not require faith and therefore offered universal value. Having assumed that Americans appreciated science and scientific reasoning, which he took to mean the need for proof, Bhaktivedanta configured ISKCON as the ideal religion of the future: a scientific religion of results and evidence, not faith.

When speaking with academics, professionals, and other elites, Bhaktivedanta repeated this claim, that ISKCON represented a universal science. *Back to Godhead*

printed a set of interviews that the Hare Krishna leader gave to such figures during the summer of 1976, and in the majority of them, he spoke at length about ISKCON as a science and made repetitive claims as to its universality. To George Gullen, President of Wayne State University in Detroit, he explained that “[t]his Krsna consciousness is not sectarian; it is a science for the whole human society.” Therefore, the swami urged, teachers ought to present it in public schools. A week later to a state representative in Michigan he repeated the same claim, that “everything should be understood scientifically. We should study what God is and how we should put our faith and trust Him. Krsna consciousness teaches this science of God. The government should cooperate with us in teaching the people the science of God.” Again, Bhaktivedanta emphasized the universality of ISKCON, deemphasized its status as a religion, and offered the movement as a science.¹⁷

Later, the same article included an interview with a journalist for the Toronto *Sun*. In this conversation, Bhaktivedanta made explicit what he has only implied elsewhere: Krishna Consciousness was far more scientific than religious, the latter of which he accepted as a characteristic of ISKCON only grudgingly. “I understand that your movement is an extension of the Hindu religion,” asked the reporter. “No, that is not correct,” answered the swami. “You will not even find the word *Hindu* in the Vedic scriptures. Real religion, or *dharma*, is not a kind of faith. It is the eternal characteristic of all living entities. It is compared to a chemical composition.” Bhaktivedanta of course correctly noted that the term Hinduism originated in post-Vedic times, though a more complete answer would have indicated that European comparative religionists had popularized the term to describe the collection of Indian religious systems of which

Bhaktivedanta's Gaudiya Vaishnavism certainly belonged. Yet the ISKCON founder concerned himself with situating the Hare Krishnas as something other than a conventional religion. Although unable to deny that ISKCON qualified as a religion, and Hinduism specifically, he set it apart as a "real religion," which he hastened to explain did not require faith. It resembled chemistry, he explained, and not Hinduism. A few minutes later he admitted to the journalist that "[i]t is also a religion, but not a man-made religion. ... [But] we are giving the real spiritual facts. We do not bluff by saying 'Meditate and become God.' Krsna consciousness is the science of how to understand God."¹⁸

"Life Comes From Life": Bhaktivedanta and His Disciples on Science

In 1973, between April 16 and May 17, then again from December 2 to December 10, Swami A.C. Bhaktivedanta engaged in a set of impromptu conversations on issues of science during morning walks with his disciples. The ISKCON members joining their guru on these walks tape-recorded the exchanges, eventually producing a set of seventeen transcripts. The Hare Krishnas published a shortened version of the first of these (recorded on April 16, 1973) in their movement's organ, *Back to Godhead*, two years later as "Life Comes From Life." With the exception of that five-page excerpt, the movement reserved the transcripts until 1979, two years after Bhaktivedanta's death, when his disciples published the remaining sixteen collected and edited conversations as *Life Comes From Life*. As the titles indicate, Bhaktivedanta spent much of the time during these talks insisting that all life, human or otherwise, originated from the source of life, Krishna. He specifically targeted the scientific view that it originated from non-

living organic chemicals (“the primordial soup”) as, in his terms, unscientific and incorrect. Darwinian evolution also troubled him, since it contradicted some of his Vedic assumptions, as did the general tendency of scientists to insist that they knew better than religious sources.

Bhaktivedanta’s “Life Come From Life” conversations with his disciples underwent so many changes and edits that many of his original words have become lost.¹⁹ In the thirty years between the morning walks and the production of verified transcripts accessible by outside scholars, many of the tapes had degraded beyond repair. The newest transcriptions of those tapes that remain, made available in 2003, demonstrate that Bhaktivedanta’s disciples heavily redacted the text before publication in the 1970s, leaving the book and intermediate manuscripts extremely unreliable in terms of revealing the original conversations in 1973. (Bhaktivedanta had encouraged his followers to “manipulate and expand” the morning walks for their own purposes, so they were in effect following his advice in editing them.²⁰) Nevertheless, the sources that are available demonstrate Bhaktivedanta and his disciples’ extreme opposition to Western science, which emerged as the clearest theme in the conversations. A typical exchange, and Bhaktivedanta’s opening words from the October 18 conversation, has the swami stating what he takes to be a Vedic truth, noting that science and scientists disagree, and dismissing them as wrong: “Even on the sun there are living entities. What is the opinion of the scientists? [Disciple: ‘They say that there is no life there.’] That is nonsense.”²¹ Bhaktivedanta maintained such distinction between science and Krishna Consciousness as a refrain in the conversations. Science accepted Darwinian evolution, but ISKCON knew that Krishna predefined all species at advance; science proclaimed that life on Earth

originated from chemicals, but ISKCON understood that life came from Krishna; science denied miracles, but ISKCON recognized the miraculous powers of the yogis; and so forth.

The *Life Comes From Life* book and identically-titled article in *Back to Godhead* portrayed Swami Bhaktivedanta as both a font of wisdom and prophet of caution against the false gods of science. The book's back cover, for example, called the contents as "a brilliant critique of some of the dominant policies, theories and presuppositions of modern science and scientists. *Life Comes From Life* will break the spell of the materialistic and nihilistic myths which, masquerading as science, have so bewitched modern civilization."²² However, the surviving tapes and transcripts reveal ISKCON at a point of transformation: a cadre of senior disciples literally leading their aging leader through his morning walks, sometimes responding to his pronouncements, and at other times prompting them. These disciples—Indian-born chemist Thoudam Damadara Singh and American-born former hippies Karandhara dasa, Brahmananda Swami, and Hrdayananda dasa Goswami—all of whom had converted to Gaudiya Vaishnavism and become Hare Krishnas in the previous decade—would soon adopt the mantle of leadership in the movement. Though each varied, with Singh the most positive towards modern Western science, as a whole they showed tremendous distrust for the American scientific establishment, scientists, and science generally. Each also insisted that ISKCON offered a better and more scientific solution to the nation and world's needs.

Whereas in interviews with outsiders, Swami Bhaktivedanta emphasized the scientific nature of Krishna Consciousness so as to appeal to Americans' innate (as he understood it) attraction to science, the "Life Comes From Life" talks represented

internal conversations among committed leaders of ISKCON. Hence Bhaktivedanta and his disciples discussed how their own movement differed from science, focusing on what they considered the most problematic issues in science and their group's relation to it. They specified science's methodological empiricism that devalued textual evidence, and what the Hare Krishnas took to be the arrogance of scientists towards alternative sources of truth. In both cases, scientists disregarded what ISKCON's leaders believed were central repositories of truth, the Vedic texts.

As far back as Bhaktivedanta's "Easy Journey to Other Planets" articles and booklet, the swami had attacked Western science as unreliable because it followed an empirical approach, rather than one grounded in the Vedic texts. In the "Life Comes From Life" conversations, the ISKCON leader and his followers explicitly and frequently specified empiricism as the root cause of science's problems and the reason for the superiority of the science of Krishna Consciousness, which rested on what to them was the irrefutability of the Vedas. Much of this developed during the conversation, though the book's editors contributed as well, revealing both Bhaktivedanta's intentions as well as how his disciples received the pronouncements. For example during the May 14, 1973 conversation, Bhaktivedanta explained "[b]ut you cannot observe, your rascal eyes are so imperfect, you cannot observe so many things. That does not mean science. Why don't you admit your imperfectional senses? You first of all admit the imperfectional senses. You cannot see. You cannot experience. ... First of all, admit that you're the most imperfect."²³ Bhaktivedanta's followers took this pronouncement against empiricism as a defense of the value of the Vedic texts in contrast to the unreliability of science, as demonstrated by the published redaction of the conversation: "[t]heir eyes are so

imperfect that they cannot observe many, many, things. Their ignorance does not make the *Bhagavad-Gita* unscientific. Why don't the scientists admit the imperfection of their senses? They must first admit the imperfection of their senses."²⁴ Empiricism valued experience over textual evidence, and therefore the Hare Krishnas rejected it.

Though empiricism worried ISKCON's leaders, they more often turned to discussions of scientific arrogance. Scientists assumed that they knew better than non-scientists, and particularly that they had better access to the truth than did the ancient Indian Vedas. This not only troubled Bhaktivedanta and his followers, but offended them, as demonstrated by their abusive language towards scientists. During the walks the swami and his disciples called scientists "thieves, demons, animals, rascals, and asses," among other terms of reprobation.²⁵ Other times, Swami Bhaktivedanta threatened to "kick in the face" the scientists who repudiated his tradition. Beneath this acrimony, the Hare Krishna leadership distrusted what they considered the arrogance of scientists in refusing to take religious accounts seriously. During the April 28 conversation, the normally well-spoken Bhaktivedanta became almost exasperated at scientists' refusal to accept textual, rather than empirical, evidence. Putting one of his disciples in the role of scientist, he confronted science in the second person. "Vedas says: 'Here is the original cause,' you won't take it. Although you are searching after the original cause. Is it not? But when Veda—Veda means knowledge, perfect knowledge. But when gives you: 'Here is the original cause.' You won't take. You shall stick to your imperfect knowledge. This is your disease."²⁶ While Bhaktivedanta certainly refrained from calling scientists 'diseased' to their faces, in internal discussions he and his followers

admitted to their anger with scientists' refusal to take seriously what ISKCON held most dear, the texts of the Vedas.

Elsewhere, both he and his disciples engaged in name-calling. In a representative exchange from one of the first morning walks, the guru and his disciples objected to scientists' unwillingness to accept the idea of a creator or law-giver behind the natural laws. This obstinacy, they insisted, stole the credit for the natural world from Krishna.

Bhaktivedanta: You [scientists] cannot produce even a grass by biological chemistry. You cannot do anything. Still you are claiming: "It is produced of chemistry, biology." What is this nonsense? Nobody questions?

Karandhara [a disciple]: Even it's produced by chemistry, there's laws...

Bhaktivedanta: Eh?

Karandhara: There's laws to those chemical reactions. They never consider who makes the laws?

Bhaktivedanta: Then? What is this? As soon as there is law, it must be considered that somebody made the law.

Karandhara: It's just a thief's mentality.

Bhaktivedanta: Eh?

Karandhara: If a thief comes on something valuable, he does not think who owns this. He simply thinks how he'll steal it.

Bhaktivedanta: That is thief's business.

Karandhara: Yes.

Bhaktivedanta: So they are all thieves.²⁷

This exchange also demonstrates how the younger members of IKSCON had internalized their guru's teachings against science, or in some cases fused Bhaktivedanta's opposition to science with the negative views of science they had brought with them from the counterculture.

The most extreme rhetoric against scientists, however, Bhaktivedanta and his disciples reserved for those who attempted to create life in laboratories or claimed that life originated from nonliving organic matter, i.e. the theory of the origins of terrestrial life from a "primordial soup" of nucleic acids and other hydrocarbons. To these scientists, the elder swami reserved his harshest criticism and one of the few recorded

mentions of, as one non-devotee attending the morning walks described, “physical violence of a most unpleasant type.”²⁸ Such scientists, Bhaktivedanta stated on several occasions, ought to be “kicked in the face with boots.”²⁹ Such fiery language indicates the degree of tension that ISKCON leaders felt between their own movement and the materialistic assumptions of most mainstream scientists. Again, Bhaktivedanta addressed science in the second person, but spoke to his disciples as well:

Karandhara: There’s a miss...They say there’s a missing link [between DNA and organic chemicals].

Bhaktivedanta: A missing link? Then I kick on your face. You’re missing this kick. Now learn it. Nonsense. Here is the missing point. Just learn it. Write vigorous articles to kick on the face of these rascals. All of you. You have got so much advanced laboratories, advanced knowledge. You do not... even you are defying the authority of God. You have become so great. And you cannot prove that life is coming out of matter. That you are leaving aside for future. And I have to believe such a rascal? Do you think it is nice? You are talking all nonsense, and I have to believe you?

Karandhara: They say they have almost proof that some acids, they make some acids and it’s almost like an animal. Just about, not quite, but almost.

Bhaktivedanta: Asses, asses?

Karandhara: Amino acids.

Brahmananda [a disciple]: Asses.³⁰

Swami Bhaktivedanta, Singh, Karandhara, and Brahmananda repeated these claims throughout the “Life Comes From Life” conversations. Science could not scientifically prove its contentions, they insisted, whereas Krishna Consciousness offered the truth, encapsulated in the perfect Vedas of ancient India.

Science Among ISKCON’s New Leadership

As he aged and his movement grew, Bhaktivedanta passed the reigns of authority to his most senior male disciples, people like Karandhara, who would become the leader of the Los Angeles Hare Krishnas, and Singh, who was to become the first director of

Bhaktivedanta's institute for religion and science issues. (Though he had many female disciples as well, ISKCON's founder selected only male members of the movement as its next generation of administrative and religious leaders, a fact which some read as indicative of Indian religious norms, and others as evidence of the elder swami's misogyny.³¹) As they traveled more extensively and served as intermediate religious teachers, or *gurus*, to new converts, they in turn became the intellectuals of the ISKCON movement. Many of them took their first steps as intellectual leaders within the Hare Krishna movement by publishing in the group's *Back to Godhead*, whose pages serve as guides to the transition in power. While Bhaktivedanta published fewer articles, his disciples published more. Here I consider five representative articles published by five members of the ISKCON's new leadership: Jayadvaita dasa, Hayagriva dasa, Yogesvara dasa, Bali Mardan dasa, and Pancaratna dasa.³² Between them, they headed ISKCON's New York temple as President and Vice President, the movement's publishing arm of Bhaktivedanta Book Trust, the group's largest commune in North America, and the Hare Krishna's new mission to France. They also demonstrate five differing perspectives on science within the Hare Krishna movement: the irrelevance of science, a neo-romantic rejection of science, acceptance of science as a support for ISKCON's own positions, the rejection of science because it conflicted with Vaishnava beliefs, and the perspective that ISKCON itself was scientific.

The American-born convert Jayadvaita dasa, who had taken the reigns of ISKCON's first center in North America, the New York temple, authored one of the first articles by the new generation of leadership to focus on science during the 1970s. A nineteen year-old when he met Bhaktivedanta in 1968, he had since become one of the

swami's editors and much later would lead ISKCON's publishing division, the Bhaktivedanta Book Trust.³³ His relatively short three-page diatribe against government-sponsored science, "Scarcity: the Fruit of Illusion" took aim at America's big science establishment, the large research-based institutions of science that received substantial federal funding. Jayadvaita's central argument in the piece paralleled the movement's wider view of science, namely that ISKCON's Vedic science ought to replace Western science, but he specified agricultural and social scientific approaches to hunger as his central concerns. Jayadvaita complained that big scientists and government planners considered the problem of resource scarcity and hunger only "from the quantitative angle, [whereas] the Vedic analysis—which presents important ideas which should be seriously considered by the modern social planners—stresses the qualitative aspect of the problem."³⁴ Quantitative approaches, he warned, minimized both real human concerns and the relation of people to the natural world, whereas the more holistic approach of ISKCON predicated its solutions on those terms. In the face of the "gross mismanagement" and the "limited reasoning power" of scientists and government leaders, Krishna Consciousness' "science of God consciousness" offered the only solution. Echoing his guru, Jayadvaita insisted that "the universal science of Krsna consciousness, which is relevant for men of all religions because it is the postgraduate science of religion, [is] the complete practical science of how everyone can actually develop love of God."³⁵ In terms of specifics, Jayadvaita prescribed a path not remarkably different from that of many evangelical Christians: each person must reconnect with God, which would in turn solve all social problems, including those of inequalities and scarcities of resources.³⁶

Though Jayadvaita used the language of science, his approach ultimately considered science irrelevant; other ISKCON leaders, however, took far more negative views of the science. Hayagriva dasa, the former graduate student-turned-hippie-turned-Hare Krishna, represented such a position. Since publishing his analysis of American poetry through the lens of Krishna Consciousness in the early issues of *Back to Godhead*, articles which themselves contained much anti-science rhetoric, Hayagriva had assumed the leadership of ISKCON's largest center in north America, the Hare Krishna commune of New Vrndavana, just outside Moundsville, West Virginia. In keeping with Hayagriva's neo-romanticism (he often cited Thoreau and Whitman), his 1972 article, "Satan, Witches, and Homemade Gods," attacked science as a manmade (or "homemade") god that separated humanity from the true God and from the natural world. Combining a rejection of both the occult and science as such forms of separation, he explained that "whether we attempt to master the world through science or witchcraft, we are expressing this same basic desire to be God."³⁷ Science, he warned, only led to the quest for more material resources for more technology, which in turn lead to conflict and war. "These struggles inevitably erupt in violence, the greatest of which has been wrong in this century by scientists and politicians through the use of nuclear weapons," Hayagriva cautioned.³⁸ ISKCON's approach of returning to nature, as he saw it, offered the solution, since it reduced the need to rely upon science and its handmaiden of technology.

Not surprisingly, the leader of the Hare Krishna's agricultural commune and aficionado of American transcendentalist poetry related the Hare Krishnas' position against Western science to a wider neo-romanticist critique of science and technology.

“It is our attempt to control nature in this age that has given rise to the machine and the demonic industrial civilization centered about it,” Hayagriva stated. “Science,” in particular, “has become man’s systematized attempt to understand the world and its purpose through his own blunt material senses.”³⁹ Rather than seek to control and manipulate nature, human beings could return to it and live in harmony with the natural world, as Hayagriva envisioned he and his coreligionists at the New Vrndavana commune did. Those who rejected this advice, he in turn rejected as demonic.⁴⁰

Others in the new cadre of ISKCON leaders adopted more cautious approaches to science, such as the young American convert named Yogesvara dasa (né Joshua Green), an American-born convert who during his studies of comparative literature at the Sorbonne encountered Krishna Consciousness. Bhaktivedanta appointed him the leader of the French branch of ISKCON.⁴¹ Though he had joined the movement only four years earlier, his five-page article in *Back to Godhead* forcefully differentiated between the Western paradigm of science and what he called the “Vedic conception,” but recognized science as a positive activity of understanding the world, albeit one that could not achieve its ends. The article, “Primal Origins,” proposed that cosmologists needed to accept the Vedic scriptures if they had any hope of understanding the origins of the universe and the nature of the cosmos. Complete with an image of an unnamed spiral galaxy, Yogesvara’s article positioned true science as a variety of Vedic knowledge. “The Vedic conception of the forthright man of science is one of an individual bent on extending the perimeters of empirical knowledge to bring about a fusion with transcendental truth. Real science, according to the Vedic conception, is not unspiritual, but rather, unrestricted, truly experimental—even to the extend of experimenting with the chanting of ancient *mantras*,

for example.”⁴² True scientists had nothing to fear in Krishna Consciousness, he explained, and would willingly sample the movement’s proscribed forms of devotion, or *bhakti*, if they truly wished to follow an open-minded research agenda. Yogesvara, of course, had no doubts that ISKCON’s *bhakti*-centered practices would prove efficacious.

Scientists who sought answers could find them in ISKCON’s texts, Yogesvara maintained. Here the empiricism of Western science contrasted with the textual basis of Vedic science, at least as ISKCON imagined it. The Hare Krishna’s texts offered knowledge of the origins of life and the cosmos that science would otherwise find impossible to obtain, Yogesvara insisted. He wrote, “Krsna consciousness, as a practical program for implementing the conclusions of spiritual science, may offer some valuable insights into primal origins, or the beginnings of the creation, which might not otherwise be available to sincere men of science. This information is drawn from authentic Vedic texts, and, as we shall see, it finds convincing supportive evidence in modern logic and scientific discovery.”⁴³ Yogesvara’s concluding sentence in this selection, that modern logic and science “support” Vedic conclusions, demonstrates the primacy of Vedic texts in his thinking. Like some textually-oriented Jews or Christians, science might “support” the positions drawn from the scripture, but in the event of contradiction or confusion, the text remained the primary source of data.⁴⁴ Science could only confirm Krishna Consciousness, or else it was incorrect and therefore bad science. Hence, Yogesvara insisted that “this article is an attempt to present basic scientific information that will help sincere inquirers understand Krsna to be the cause of the universe—and help them understand Krsna’s causeless nature.”⁴⁵ Science offered value in as much as it supported Krishna Consciousness’s own views and beliefs.

While Yogesvara emphasized the consensus of science and Krishna Consciousness, albeit within the rubric of science corroborating ISKCON's own positions, other young intellectual lights within the movement took the opposite approach. Bali Mardan dasa, whom Bhaktivedanta had appointed a trustee of the ISKCON's new publishing arm, the Bhaktivedanta Book Trust, authored an attack on Darwinism in *Back to Godhead*, sections of which could just as easily have come from a fundamentalist Christian opponent of evolution. Echoing the words of scientist Ralph Lapp, who warned in *The New Priesthood* of science becoming "the Great Dictator of our times," Bali Mardan accused Darwinian science and evolutionary biologists of "attack[ing] man's faith in God and establish[ing] science as the new deity with themselves as its priests."⁴⁶ While Lapp's accusations of the priesthood of science echoed a latent Protestant anti-clericism and focused on science's danger to democracy, Bali Mardan warned of science as an alternative religion, one that sought to establish its practitioners as the new religious leaders of society.

Like Christian and Jewish opponents of Darwinism, Bali Mardan argued that ultimately the evolutionary biologists used bad science to reach bad conclusions. These scientists, he noted, "cleverly rearrange their theories to fit the changing evidence," and create theories such as evolution, an "unscientific claim to satisfy the minds of atheistic men."⁴⁷ The reason for his critique of Darwinism also paralleled that of most Jewish and Christian opponents of evolution who reject evolutionary theory because they believe it contradicts statements of their sacred texts. Christians and Jews concern themselves with the Biblical description of creation in Genesis, but one of the main problems for Bali Mardan and other members of ISKCON lay in the Vedic claim of a thriving ancient

human civilization, hundreds of thousands, or even millions, of year before evolutionary biology accepts the presence of homo sapiens. Bali Mardan raised this point directly in his article by accepting the fossil evidence of ancient Neanderthals and Cro-Magnons but insisting that these variant species existed alongside fully developed human beings who left no physical evidence. “Excavated bones come from aboriginal tribes living side by side with the advanced Vedic culture,” he explained. But since the Vedic peoples cremated their dead, they left no fossil evidence of their ancient civilization in India, leaving empirical materialistic scientists to assume that human beings evolved only within the past two-hundred thousand years.⁴⁸ Bali Mardan concluded his article with a forceful defense of the authenticity of the Vedas, which he regarded as the bedrock of the ISKCON worldview and therefore its science. “The infallible source of knowledge is the Vedic scriptures which, unlike the speculative postulates of empirical scientists, are spoken directly by the Supreme Lord Himself.”⁴⁹ Science offered no value, Bali Mardan argued, because it disagreed with the fundamental Vedic texts and therefore demonstrated its unreliability.

In 1974 Pancaratna dasa, an American convert then serving as vice president of IKSCON’ temple in New York and contact person for outsiders, joined a non-devotee and recent graduate of Fordham University’s Ph.D. program in Asian religious studies to co-teach an experimental course in Krishna Consciousness at Fordham.⁵⁰ Pancaratna and his fellow instructor J. Frank Kenney offered the course to ten students at Fordham University’s campus in Manhattan in the Spring 1974 term.⁵¹ As a team, Kenney and Pancaratna dasa assumed three objectives, namely 1) the fostering of an “in-depth understanding of the religious experience” of Krishna Consciousness, 2) a “broad critique

of Krishna Consciousness from a variety of [academic] viewpoints,” such as sociological, psychological, and phenomenological studies of the movement, and 3) “active student involvement” in learning. None of these three goals stand out as overly remarkable for a college seminar. However, each instructor also approached the course with his own objectives. Kenney sought to use Weberian sociology and the psychological approaches of Carl Raschke to study ISKCON.⁵² Pancaratna explained his approach as follows: “in order to convey some understanding of Krishna Consciousness I thought it necessary to emphasize the following points: (1) Krishna Consciousness is not a religious faith; it is a science; (2) Krishna Consciousness is neither sectarian nor dogmatic but rather scientific because it involves a practical, ‘fool-proof’ technique for achieving God-consciousness; (3) the scientific nature of Krishna Consciousness is most clearly demonstrated by the process of distinguishing matter and spirit; and (4) as a consequence, the first step in Krishna Consciousness realization (and the first point presented for class discussion) was the concept ‘I am not this body,’ a concept which is scientifically verifiable in view of the ever-changing body.”⁵³

Each of Pancaratna’s four emphases highlighted what he considered the scientific nature of ISKCON. However a tension existed between Pancaratna’s insistence on the nature of Krishna Consciousness and the reality that he and Kenney taught the course in the university’s Department of Religious Studies, and described the class as “the study of this new American religion” of Krishna Consciousness. Implicitly, Pancaratna dasa even accepted the reality that students would compare ISKCON to other religions, explaining that the course “made available the vast philosophical and religious understanding of the Vedic literature and challenged the students to investigate their own religious values and

attitudes.” Kenney likewise noted that the students attempted to understand the Hare Krishnas by “baptizing them into one’s own religious frame of reference.”⁵⁴ Given the location of the course in a religious studies department, statements of both professors, and their evaluations of student involvement, clearly all involved recognized the religious nature of Krishna Consciousness. Nevertheless, Pancaratna dasa focused so heavily on science because he accepted Bhaktivedanta’s teaching on the scientific nature of the Hare Krishna religion, and ISKCON’s desire to demonstrate its scientific nature to a wider audience.⁵⁵

These five voices—Jayadvaita dasa, Hayagriva dasa, Yogesvara dasa, Bali Mardan dasa, and Pancaratna dasa—reveal five different positions on science taken by leaders of the Hare Krishna movement: that science offered nothing relevant, that it dangerously separated humanity from God and nature, that it provided value in as much as it corroborated ISKCON’s ideology, that it conflicted with Vaishnava beliefs, and that ISKCON itself represented a scientific alternative. Although each obviously differed, with the third and fourth actually conflicting, the five perspectives did operate under a wider umbrella. Krishna Consciousness, all agreed, offered the best solutions to individual and global problems, provided the best information and data on the workings of the universe, and most perfectly fit within a modern scientific approach to life. Ultimately, all agreed that their own religious movement offered much more than conventional Western science.

The Bhaktivedanta Institute and *The Scientific Basis of Krsna Consciousness*

In 1974, as Pancaratna dasa attempted to demonstrate the scientific nature of Krishna Consciousness to undergraduate students, Swami A.C. Bhaktivedanta Prabhupada created an institution within ISKCON to do the same thing on a broader scale. The swami hoped that this new center, the Bhaktivedanta Institute, would propagate what he considered the scientific nature of Krishna Consciousness. In the institute's own words, "[t]he main purpose of the Institute is to explore the implications of the Vedic knowledge as it bears on all features of human culture, and to present its findings in courses, lectures, monographs, books and journals of high scientific standard."⁵⁶ Though it would require several years before the Institute produced any such findings, publications, or conferences, eventually during the 1980s (after its namesake's death) it would become the intellectual center for science and religion within ISKCON. A decade after that, it splintered into several competing Bhaktivedanta Institutes when its leaders assumed fundamentally different positions on science. But in the 1970s, it served as a catalyst that further involved one of ISKCON's few leaders with a doctorate in science, Svarupa Damodara dasa, in bringing Krishna Consciousness to scientists.

Svarupa Damodara dasa served as the Bhaktivedanta Institute's first director in 1974, though he had converted to ISKCON only three years earlier.⁵⁷ Svarupa, who also published under his birth name of Dr. Thoudam Damodar Singh, had taken part in the 1973 "Life Comes From Life" conversations between Bhaktivedanta and his disciples, and at the time of those talks he was also studying for his Ph.D. in organic chemistry at the University of California, Irvine. Despite his Sikh surname, Singh had been raised a Hindu, and like Bhaktivedanta he studied chemistry at a prestigious Indian university,

though in Singh's case at two, both Gauhati University and Calcutta University. Unlike Bhaktivedanta, Singh found science far more attractive than religion, and dedicated himself to a career in chemistry during his young adult years, which brought him to doctoral studies in the United States. His conversion to ISKCON followed a typical pattern in America, beginning with a spiritual crisis brought on by a personal loss (the death of his mother), a chance meeting with Hare Krishnas singing and dancing on the street, and eventually a visit to an ISKCON center. Singh, who adopted the religious name of Svarupa Damodara dasa during his initiation into the Hare Krishna movement, differed from many of the other American converts by remaining in higher education and continuing his advanced studies in science. As an Indian who had embraced his Hindu religion, though trained in science under first the British and then American educational system, he shared with Bhaktivedanta a liminal location in regard to science and religion.

Bhaktivedanta recognized Svarupa né Singh, one of the movement's first Ph.D.s, as a potential intellectual leader within ISKCON, and appointed Svarupa head of the new Bhaktivedanta Institute. Svarupa's ascendancy as intellectual and scientific leader within ISKCON resulted in an immediate windfall, the production of the first book-length treatment of religion and science issues within the Hare Krishna movement since Bhaktivedanta's 1960 *Easy Journey to Other Planets*. With a first run of thirty-thousand copies, Svarupa's *The Scientific Basis of Krsna Consciousness* (1974) represented one of the first books published by ISKCON's Bhaktivedanta Book Trust not written by Swami Bhaktivedanta himself. Its author intended the text to directly confront scientists' materialistic and empiricist assumptions, and he hoped it would lead to a wave of scientists accepting Krishna Consciousness: "This booklet is primarily directed to our

scientific friends,” he wrote in the book’s first chapter. “Instead of centering one’s consciousness around temporary machines, one should transfer his consciousness to Sri Krsna, the supreme scientist, knowing that He is the central point for all activities. ... [A]ll activities have no value unless Krsna is included within these activities. Thus we can understand that the science of Krsna is the only real science which is to be learned and practiced.”⁵⁸ Svarupa’s confrontational approach—calling the Krishna Consciousness the “only real science”—encapsulated ISKCON’s wider perspective on Western science, namely that the movement’s own approach ought to replace that of normative American science. Three basic themes dominate *The Scientific Basis of Krsna Consciousness*: a teleological argument for God’s existence, a dismissal of normative scientific methodologies, and a defense of the value of the Vedas, primarily the *Puranas*, the Vedic texts that describe creation and cosmology. The net effect minimized the value of Western science and maximized the Vedic science that ISKCON promoted.

After a brief introduction, Svarupa’s book turned to demonstrating the evidence for the existence of God. He utilized a classic approach, that of teleology, the study of the order inherent in nature. Teleological arguments claim that the existence of order in the cosmos implies the existence of a creator, and have been a fixture of theology since the work of Plato and Aristotle. Thomas Aquinas authored a teleological argument for the existence of God, the American evangelist Jonathan Edwards used teleology in his work, and the Intelligent Design movement that originated in late twentieth-century Christian circles also relies upon a teleological approach. Yet perhaps the most famous of such teleological arguments for the existence of God is that of British theologian William Paley (1743-1805), who formulated what later students of philosophy named the

watchmaker argument. Paley wrote that should an observer come across a watch laying upon the ground, one would not assume that the watch had randomly come into existence there, but rather “the inference, we think, is inevitable, that the watch must have had a maker: that there must have existed, at some time, and at some place or other, an artificer or artificers who formed it for the purpose which we find it actually to answer; who comprehended its construction, and designed its use.”⁵⁹ The complexity of the watch, Paley explained, and the inherent order evident within its mechanics could only originate from a creator.

Svarupa’s teleological argument followed a similar vein. The “systematic path” of planetary orbits, he argued, provided evidence of a designer, as did the orbits of electrons around an atom’s nucleus. Both planets and particles traced perfectly looped orbits around their centers, and demonstrated the presence of an author of the natural law of rotation, a law that governed everything from planet to electron. “Thus,” Svarupa explained, “from the submicroscopic reaches to the galactic objects, this material universe is running like intricate, well-oiled clockwork according to great natural physical laws and principles.”⁶⁰ Such laws and principles, he insisted, demonstrate a law-giver and origin. On a biological level, Svarupa noted, the social patterns of honeybees and their ability to build sturdy and intricate hives revealed a similarly complex order within nature, as did the physical laws of optics and gravity. Each demonstrated the presence of a supreme creator, “Lord Sri Krsna, the supreme scientist and supreme engineer, under whose kind will the whole cosmos is working.”⁶¹ Illustrations provided additional evidence, with one picture showing the familiar double helix of deoxyribonucleic acid (DNA) alongside a peg-and-ball diagram of the genetic molecules

that readers might recall from college or high-school chemistry kits. The drawing included such scientific details as molecular chains labeled as cytosine and guanine, two of the four chemicals that form base pairs in DNA, as well as the structural formula for the compounds, the coded diagram that allows chemists to physically represent molecules. The caption explained, “[t]he intricate DNA molecule exhibits the artistry of the supreme scientist, Krsna.”⁶² Another illustration three pages later showed bees in their hexagonal cells, with the caption that “[t]he Supreme Lord arranges the social organization of the bee colony.”⁶³

Having established the existence of God using the teleological argument (or so the author assumed), he moved to dismiss the value and power of contemporary Western science and its practitioners. First, Svarupa targeted the abilities of scientists to both understand and accurately observe the natural world, requirements of the empirical foundation of modern science. Scientists lacked the power to comprehend the full nature of the universe, he explained, and even if they could, they did not have the faculties to glimpse it. “Certainly, the secrets of the universe cannot be unfolded by the tiny brains of material scientists. We should agree without a doubt that man’s vision in all directions is extremely limited by the inadequacies of his senses, his technology and his intellect.”⁶⁴ Even more damning, Svarupa argued, scientists insisted on the ability to prove all conjectures, using what he had already dismissed as limited power of reasoning and observation. This resulted in the inability of scientists to accurately describe the natural world as well as their refusal to accept the textual evidence that ISKCON insisted offered the solution. “The greatest disease in the minds of scientists is that they do not believe

that something is a fact unless it is proved by scientific experiments,” Svarupa explained.⁶⁵

Yet Svarupa insisted that he and his movement offered the medicine for this disease: the ancient Indian texts, the Vedas. Seizing a story that his guru Swami Bhaktivedanta told him during the “Life Comes From Life” walks, Svarupa compared empirical scientists to frogs living in wells. Just as the frog in the well could not imagine the size of the Pacific Ocean, human scientists cannot understand the true nature of the universe. Only outside knowledge could enlighten the frog. Complete with an illustration of “Dr. Frog, Ph.D.,” Svarupa explained that the frog’s belief that it accurately perceived and understood the nature of its own well revealed only its hubris and ignorance. Even if one removed the frog from the well, it would remain mired in well-consciousness, unable to grasp the world outside its formative experiences. Better, he explained, if the frog accepted the teachings of a wiser and authoritative teacher. He concluded by reminding the readers that human beings faced the same predicament. “The point is that comprehending the unlimited knowledge beyond by our limited means is simply a waste of time and energy. All the knowledge is already there in the authorized scriptures, the *Vedas*. One simply has to take the knowledge from the supreme authority, Krsna.”⁶⁶ The Vedas, Svarupa insisted, offered the authoritative explanations that both frogs and humans lacked.

A defense of the Vedas and their relevance for modern science occupied much of the remaining pages of the booklet, particularly the Vedic texts on creation and cosmology called the Puranas. After a two-page dismissal of Darwinian evolution as “mental manipulation” predicated on a “poor fund of knowledge,” Svarupa turned to the

Puranic description of creation, which he called “complete and perfect knowledge (science)” as well as “infallible” and “the Supreme Judgement.”⁶⁷ A full examination of cosmology and creation narratives in the Puranas requires extensive explanation, and like all texts compiled over thousands of years from oral traditions, the Puranas offer multiple narrations and descriptions, some of which require interpretive harmonization.⁶⁸ Those that Gaudiya Vaishnavas frequently cite, and the two to which Svarupa turned in *The Scientific Basis of Krsna Consciousness*, describe the existence of a sum total of eight million four hundred thousand possible living species, all pre-defined by God and not all of which exist at any one time on any given planet.⁶⁹ (The Puranas envision multiple cycles of existence and nearly infinite inhabited planets throughout the universe.) Evolution occurs on a spiritual level when individual souls progress through the chain of life towards life forms with more highly developed minds. The Puranas cited by ISKCON provide no details on material evolution, leaving most Hare Krishnas to reject Darwinian evolution and argue for direct special creations of species new to a particular planet as needed. (Others accepted guided evolution, with the understanding that Krishna has predefined all eventual forms.) Svarupa summarized the Puranic explanation as the “complete and perfect knowledge of evolution in minute detail,” and chided scientists for not accepting what he insisted was self-evidently perfect.⁷⁰ The author concluded his book by dismissing “most modern scientists” as “demoniacs” and proponents of “less than animal civilization,” and restating the need for all people, scientists included, to seek out “a bona fide spiritual master, initiator, or teacher of the science, ... the science of Krsna, Krsna consciousness.”⁷¹ It is doubtful that many scientists reached the end of Svarupa Damodara dasa’s *The Scientific Basis of Krsna Consciousness*, a book which its

author intended for his “scientist friends,” without being offended. The text denigrated scientists as small-brained, vision-less, demoniac, animalistic, obstinate, and diseased. Its author concluded the text with an image of a leering scientist pushing a button while a mushroom cloud rose from an annihilated city, indicating both his movement’s strong animosity towards the scientific establishment as well as wider position that ISKCON’s Vedic science ought to replace Western science.

“Spiritual Revolutions”

Despite ISKCON’s hopes and intentions, most of its future adherents did not come from scientific backgrounds, but from the American youth culture that rejected wider society’s establishments of science, education, and government.⁷² While these potential adherents might read a few articles in *Back to Godhead*, they probably would not (and did not) take the time to digest entire books when first confronted by Krishna Consciousness. ISKCON therefore adopted the religious tract as a broadcast method of communicating with and attracting potential new devotees. Some of the tracts took the form of trifold pamphlets, while others resembled short newsletters. The ISKCON San Francisco and Los Angeles communities produced one of the first of the latter variety in 1975, titled “Spiritual Revolution,” a four-page tract distributed on college campuses in the San Francisco area. Like other sources produced by the Hare Krishna movement during the 1970s, “Spiritual Revolution” spoke the language of science: it defined Krishna Consciousness as a science, rejected the dominant paradigms of Western science, and portrayed ISKCON as scientific in scope and character. “Spiritual Revolutions” also included the same manichean rhetoric of Svarupa’s *Scientific Basis of Krsna*

Consciousness, of Vedic science vs. Western science. But in keeping with Bhaktivedanta's recognition that America valued science, "Spiritual Revolution" attempted to show the forward-thinking nature of ISKCON's Vedic science by indicating its compatibility with the cutting edge sectors of modern science, quantum physics and relativity.

The tract opened with three commentaries in parallel columns: "Seeking the Complete," "Purpose," and "Who Am I?" The central column, "Purpose," under a grey-toned photo-duplication of French sculptor Auguste Rodin's *The Thinker*, declared the intentions of Hare Krishnas in disseminating the pamphlet. With capital lettering to draw in the reader, it trumpeted: "SPIRITUAL REVOLUTION is meant to introduce to alternatively-minded people, truth seekers or just the plain curious, a revolutionary and liberating source of information and association." Explaining that the group sought out "students and intellectuals," the short introduction summarized ISKCON's ideology as "a system of practical knowledge" rooted in the Vedic writings, and distinct from the "dogmas" of modern life. Invoking the prestige of scientists and other elites, it closed by exclaiming: "Such great personalities as Einstein, Gandhi, Aldous Huxley, Schweitzer, Emerson, Thoreau, Hegel, Kant and many others all praise these writings for their deep insights into the toughest questions of life. We ask you, in the spirit of science, to examine these concepts and judge for yourself."⁷³ The spirit of science, which the authors implied was an epistemological individualism reminiscent of classical views of the lone scientist in search the truth, dominated much of the tract, with three of the four other articles and the lone cartoon all focusing on or invoking science. (The exception, titled "Uncover: World Control Plot" described an attempt by "so-called world leaders"

to destroy religion and replace it with a materialistic society predicated on mindless subservience to government elites. Though it did not target science, it supported both the anti-establishment and anti-materialistic messages of the other articles.⁷⁴⁾

The pamphlet's first-page first-column story, titled "Seeking the Complete," recognized the complexity of modern life while at the same time disparaged the ability of the establishment to provide stability to American culture. It opened with a criticism of scientists: "In this age of rapid changes, extremes and conflicts, where even expected pillars of intellectual and emotional stability, the scientists and psychologists, are often quarrelling, erratic and uncertain, the Vedic knowledge presents a refreshing, complete, non-sectarian and reasonable explanation of reality."⁷⁵ The juxtaposition of Vedic knowledge with scientific knowledge cemented this source as well within the mainstay of ISKCON's view of science, as did the insistence on the former's reasonability and universality. The article continued, contrasting the Hare Krishna's message with religion and philosophy as well as science. It explicitly rejected what the authors considered the relativisms of "extremists proclaiming their particular 'ism' to be the one and all. Mankind is clamoring for a broader philosophy than the material scientists can provide." Much of the remainder of "Seeking the Complete" defended the scientific nature of Vedic learning, Vedic texts, and Vedic techniques. It labeled Krishna Consciousness "The Supreme Science of the Self," and included a two-paragraph summary of "Spiritual Revolution" editor Jayadvaita dasa's argument against American big science establishment from his "Scarcity: The Fruit of Illusion" article in *Back to Godhead* (1972), namely that God provided for all material needs and government-backed science lacked the ability to solve problems of hunger or other social problems.⁷⁶

Two of the more unique contributions of the “Spiritual Revolution” pamphlet were a one-third-page cartoon titled “The Conversion of Doctor Mud” and a brief editorial on the back page of the tract, “The Grand Illusion.” The first of these items positioned scientists as tools of a fascist state, whereas the second tried to demonstrate the compatibility of recent scientific findings with Vedic science. Together, they indicated the simultaneous effort within ISKCON to replace Western science as well as defend the movement itself as scientific.

The ‘Doctor Mud’ cartoon contained eleven frames that told the story of a teacher, most likely a college professor, indoctrinating students with materialism. The unnamed cartoonist drew Doctor Mud as a caricature: he wears a suit and eyeglasses, and features receding curly hair and a big nose, looking like an overeducated egghead. Representing the arrogant material scientist, he propounds to a rows of students, “Meet your origin! The primordial mass of matter, the ‘chunk!’ If you do not accept the ‘chunk,’ you will fail this class, and never succeed in life. Matter is all in all. Seek no more.” In an Orwellian twist, a hitherto invisible loudspeaker then addresses the professor, “Very good, Dr. Mud, our potential opposition, all the intellectuals and students, are now robot slaves of materialism. Now we can continue to exploit the natural resources and peoples of the world without opposition. The military-industrial states will cover every inch of the globe. Even if it means the death of freedom and the earth, we shall enjoy our perverted senses at all costs! Cut down the trees! Pollute the skies! Fill the cities! Build factories! Destroy spirit! Kill soul! And then, everything will be under *our* control! Thank you, Prof. Mud!”⁷⁷ Potential readers could no doubt recognize the allusions within the cartoon to environmental devastation and government wrongdoing. The years

preceding 1975, when ISKCON published the cartoon, witnessed an explosion of interest in ecology, including the first Earth Day and the founding of Greenpeace in 1970 and 1971 respectively.⁷⁸ Similarly, the recent events of Watergate, culminating in the resignation of President Richard Nixon in 1974, reminded readers of government corruption and selfishness. The tract's readers, already addressed as "students and intellectuals" on the first page of the pamphlet, would also have recognized the implication that their college classes indoctrinated them into materialism, perhaps a subtle jab at ISKCON's foes who accused the Hare Krishnas of indoctrinating its own members into a foreign religious cult.⁷⁹

The cartoon climaxes in the grace of Krishna causing a "stirring in the heart" of the students, followed by their complete "liberation" from "illusion and bondage" through the "transcendental sound" of the Hare Krishna *mantra* (Hare Krishna, Hare Krishna, Krishna Krishna, Hare Hare...). Finally, the students confront Dr. Mud, accuse him of "brainwashing us with material sound," and declare, mimicking the words of ISKCON founder Swami Bhaktivedanta, "Now we demand that you teach the truth about life. Life comes from life, not matter." Dr. Mud then rejoices, having been freed of materialistic bondage by Krishna's "liberating spirits," and himself begins singing the Hare Krishna mantra.

The message of the Dr. Mud cartoon combined anti-establishmentarianism and environmentalism with the strong tradition of opposition to materialistic science within ISKCON. The cartoon ultimately portrayed Dr. Mud as more a naive tool than a nefarious demon, in notable distinction to the illustrations in Svarupa's *Science Basis of Krishna Consciousness* and Bhaktivedanta's dismissals in "Life Comes From Life." "I

was never satisfied at heart by teaching materialism, but I went to their schools, they paid my salary and so...,” explained the character.⁸⁰ That the cartoonist entitled the piece “The Conversion of Dr. Mud” recognized the possibility that individual scientists might accept Krishna Consciousness, and therefore exempt themselves from the wholesale rejection of their Western materialistic methodologies. In other words, the Dr. Mud cartoon in “Spiritual Revolution” demonstrated a more moderate view of science than many other ISKCON sources, perhaps in keeping with the movement’s attempt to reach the widest possible audience of college students. Nevertheless, Dr. Mud’s pronouncement also makes it clear that the rejection of both materialism and the mainstream scientific establishment accompanied conversion to the Gaudiya Vaishnavism of ISKCON.

The final page of “Spiritual Revolution” featured a short commentary titled “The Grand Illusion,” a possible reference to the identically-named 1937 French film that won awards for its depiction of futility during wartime. The placement of images contextualized the piece, which discussed the similarities of non-deterministic quantum physics and Vedic science. Above the article an image of a smiling A.C. Bhaktivedanta Swami Prabhupada positioned the story (and indeed the entire pamphlet) as a part of the guru’s authoritative tradition. “The Grand Illusion” itself featured an in-line image of the God Krishna surrounded by the electron orbits of an atom, a easily-recognizable symbol that postwar Americans recognized as representing nuclear science. Readers could also understand the message of this iconography before reading the accompanying article: Krishna Consciousness, and Krishna in particular, had something to do with modern subatomic science.

The brief text of “The Grand Illusion” explicated the details of that relationship, explaining that modern science had finally recognized the cosmic truths long ago revealed in the Vedas, a theme which Swami Bhaktivedanta had stressed since the 1950s. Both Vedic science and quantum physics, the tract explained, rejected Newtonian mechanism and materialism. Alluding to physical theory, the article explained that though matter appears solid, it comprised mostly empty space, with only the raw energy of non-material forces providing reality. Scientists called these forces electrical and nuclear attraction, “Spiritual Revolution” explained, and the Vedas call them *sakti*, the Sanskrit word for vital essence or energy. Both suggest a non-material conception of reality, the article argued. Further, the new scientific field of quantum physics discredited traditional Newtonian mechanism, which the article equated with the impersonalistic view of a clock-work universe created by a distant and uncaring deity. On this matter, “The Grand Illusion” declared, cutting-edge Western science and Vedic science agreed.

All matter or unconscious things have been reduced by the scientist to some kind of energy or *sakti*, it is obvious that this energy can only be referred to some conscious principle. [*sic*] Scientists like Einstein, Eddington, James Jeans and J.B.S. Haldane have already recognized this. Eddington says, “Modern physics have eliminated the notion of substance ... I regard consciousness as fundamental. I regard matter as derivative from consciousness.”⁸¹

Even scientists now recognize the foundation and basis of life in consciousness rather than gross material matter, the editors of “Spiritual Revolution” insisted. The article summarized the findings of all four scientists as “almost identical to that of the five thousand year old Srimad Bhagavatam,” one of the books that IKSCON considers part of the Vedic corpus. Citing the work of O.B.L. Kapoor, Ph.D., a physicist associated with

the Hare Krishna movement, it concluded by recommending the structuring of society around the scientific details discovered in that text.⁸²

But the editors of the pamphlet did not end “The Grand Illusion” with a positive evaluation of science. Rather, they cautioned that most scientists did not accept the discoveries of their own vanguard, since materialism had mired them in mechanism and impersonalism. “The social implications of the scientific discoveries of such great men as [Albert] Einstein, [Arthur Stanley] Eddington, J.B.B. Haldane, and Sir James Jeans are being suppressed in favor of the views of their more ordinary and short-sighted colleagues. The pernicious influence of politics can even be found in the so-called spotless halls of science.”⁸³ The overall thrust of the article, and indeed all of the “Spiritual Revolution” newsletter, remained that the Hare Krishnas offered a scientific alternative to the destructive, dangerous establishments of the West. Famous scientists themselves supported this contention, the tract’s authors maintained, and confirmed the ancient truths of Gaudiya Vaishnavism.

ISKCON After Bhaktivedanta

The International Society for Krishna Consciousness brought to America a message opposed to the norms of Western science, namely empiricism and methodological materialism. Once in the United States, Swami Bhaktivedanta attracted mostly disaffected youth associated with the counterculture, whose resistance to the establishments of education, government, religion, and economics fused with the swami’s view of science, producing a movement demonstrating strong antagonism towards the institutions and ideals of American science. Through articles, books, lectures, interviews,

and other media, the leaders of the Hare Krishna movement explicitly criticized science and called for replacing it with what they believed to be a better, more authentic alternative rooted in the ancient Indian texts of the Vedas.

Swami A.C. Bhaktivedanta spent most of his adult life attempting to create an alternative to Western modernity grounded in the Indian Vedas. From his earliest exposure to Western civilization at the Scottish Churches College, he rejected the Occident as materialistic and lost, and science as culpable in that process. After Gandhi's Indian nationalism failed to capture him, Bhaktivedanta turned to a traditional form of Hindu religiosity, which he embraced as an alternative to British colonial modernism. Yet just as electricity fascinated Abhay Charan De as a child, the elder swami continued to wrestle with the problem of science, never able to completely ignore what he had repeatedly dismissed as irrelevant. In India, he wrote of the scientific discovery of anti-matter as both vindication and demonstration of Vedic truths. In America he simultaneously reached out to scientists as well as belittled, even threatened them with "kicks to the head." Throughout, A.C. Bhaktivedanta insisted on the superiority of ISKCON's religiously-based science over the materialistic Western alternative, and looked to his religion's views of the universe as a replacement for the West's.

Following the death of A.C. Bhaktivedanta Swami Prabhupada, the Hare Krishna movement fragmented into a variety of sub-movements. Several of the swami's leading disciples created their own splinter groups, and even among the Hare Krishna members who remained within their International Society, competing views proliferated on topic of leadership, the nature of the guru, institutional governance, the eternality of salvation, among others. Even into the twenty-first centuries, several institutional forms of Krishna

Consciousness compete alongside ISKCON for the mantle of leading Gaudiya Vaishnavism in the West. The immigration to the West of large numbers of Indian Vaishnava practitioners, who of course have their own perspective on how best to practice their religious tradition, further complicates the picture. While the International Society for Krishna Consciousness continued past Bhaktivedanta's death, the loss of the charismatic swami who founded the movement splintered Krishna Consciousness.⁸⁴

On the issue of science, some of the sub-movements adopted more moderate positions, encouraging dialog with scientists and even rapprochement, while others increased their manichean rhetoric against science. The Bhaktivedanta Institute itself, the institutional home for the treatment of science and religion issues, splintered into four branches separated by geography, ethnic background of its leaders, and ideological approaches. While the Alachua, Florida branch led by Anglo-American converts took a more stridently anti-science position, Satsvarupa dasa's Denver-based Bhaktivedanta Institute moderated its approach and attempted to reach out to scientists and emphasize commonalities. The Bombay (Mumbai) branch, run entirely by Indian-born Vaishnavites, transformed the Institute into a think-tank on consciousness studies, and the American convert-led smaller Los Angeles group dedicated itself to publishing material opposing Darwinism. Though the Bhaktivedanta Institute, like ISKCON, divided institutionally, all continued to follow Bhaktivedanta's intellectual tradition, though with different points of emphasis. One commonality remained: even into the twenty-first century, the leaders and members of the International Society for Krishna Consciousness looked to their movement's own view of science, an ideology predicated in the ancient Indian texts known as the Vedas, as a *replacement* for modern science.

¹ These numbers cover the period from 1970-1977 only. Of the thirteen hundred and fifteen recorded conversations between Bhaktivedanta and members of his movement or outsiders, he mentioned science or scientists three thousand six hundred and nineteen times. He mentioned the topics five hundred and eighteen times during his lectures on the Bhagavad-Gita. The Bhaktivedanta Archives, ed., *The Bhaktivedanta Vedabase (Version 2003.1)* (Sandy Ridge, N.C.: The Bhaktivedanta Archives, 2003).

² *Back to Godhead* published fifty-six articles listing Bhaktivedanta as author during this period. However the journal also published numerous other articles, based on his lectures and interviews, which are substantially the product of Bhaktivedanta. The nine that I have considered here are those that most directly consider science: A.C. Bhaktivedanta Swami, "An Ancient Science for Modern America," *Back to Godhead* 1, no. 38 (1970), A.C. Bhaktivedanta Swami, "Beyond Animal Technology," *Back to Godhead* 12, no. 5 (1977), A.C. Bhaktivedanta Swami, "Life Comes from Life," *Back to Godhead* 10, no. 12 (1975), A.C. Bhaktivedanta Swami, "Perfect Questions, Perfect Answers," *Back to Godhead* 1, no. 63 (1974), A.C. Bhaktivedanta Swami, "Reincarnation and Beyond," *Back to Godhead* 11, no. 12 (1976), A.C. Bhaktivedanta Swami, "Sri Prabhupada Speaks Out," *Back to Godhead* 12, no. 10 (1977), A.C. Bhaktivedanta Swami, "Summer Session," *Back to Godhead* 11, no. 10 (1976), A.C. Bhaktivedanta Swami, "The Search for the Divine," *Back to Godhead* 1, no. 49 (1972), A.C. Bhaktivedanta Swami, "The Tiny World of Modern Science," *Back to Godhead* 1, no. 61 (1974).

³ Bhaktivedanta Swami, "An Ancient Science for Modern America," 5.

⁴ Ibid.

⁵ Strictly speaking, ISKCON began using diacritical transliterations rather than standard roman-script transliterations. From 1970 onward, the movement spelled the name of the God Kṛṣṇa using the subscript anusvara diacritical marking, which appears as a dot under the letters 'r,' 's,' and 'n.'

⁶ Bhaktivedanta Swami, "An Ancient Science for Modern America," 5-6.

⁷ Ibid.: 6.

⁸ Ibid.: 8.

⁹ A.C. Bhaktivedanta Swami, "Morning Walk at Cheviot Hills Golf Course -- May 13, 1973, Los Angeles (730513mw.La)," in *The Bhaktivedanta Vedabase (Version 2003.1)* (Sandy Ridge, N.C.: The Bhaktivedanta Archives, 2003).

¹⁰ Bhaktivedanta Swami, "An Ancient Science for Modern America," 6.

¹¹ Edward Said, *Orientalism* (New York: Pantheon Books, 1978).

¹² Richard King, *Orientalism and Religion: Post-Colonial Theory, India and the Mystic East* (New York: Routledge, 1999), 32.

¹³ As of 2007, Paul E. Valliere currently serves as Professor of Religion and McGregor Professor of the Humanities and Butler University (Indianapolis, Indiana).

¹⁴ Bhaktivedanta Swami, “The Search for the Divine,” 3.

¹⁵ Ellipses in the original. Ibid.: 6.

¹⁶ Ibid.

¹⁷ Bhaktivedanta Swami, “Summer Session,” 17-18.

¹⁸ Ibid.: 19-20.

¹⁹ There are three distinct redactions of these conversations: the transcriptions of the tapes; the “Life Comes From Life” manuscript, available in the archives of the University of California at Santa Barbara; and the published book, *Life Comes From Life*. The transcripts are the most accurate, though there are none available for the conversations on April 18, May 7, May 8, and May 11 (what *Life Comes From Life* calls the first, sixth, seventh, and eighth morning walks). The intermediate manuscript generally matches the published book, though it contains some material from the transcripts that editors removed before publishing. The book itself is a poor source for the original conversations between Bhaktivedanta and his followers, since its editors rearranged, sanitized, and otherwise changed nearly every conversation.

²⁰ A.C. Bhaktivedanta Swami, “Morning Walk -- December 10, 1973, Los Angeles (731210mw.La),” in *The Bhaktivedanta Vedabase (Version 2003.1)* (Sandy Ridge, N.C.: The Bhaktivedanta Archives, 2003).

²¹ International Society for Krishna Consciousness, “Life Comes from Life,” (Manuscript, c. 1977) Muster Betrayal of the Spirit Collection, ARC Mss 28, Department of Special Collections, University Libraries, University of California, Santa Barbara, 1. The published *Life Comes From Life* includes a slight variance of this exchange: “Even on the sun and moon there are living entities. What is the opinion of the scientists? [Disciple: ‘They say there is no life there.’] That is nonsense.” A.C. Bhaktivedanta Swami, *Life Comes from Life: Morning Walks with His Divine Grace A.C. Bhaktivedanta Prabhupada* (Los Angeles: Bhaktivedanta Book Trust, 1979), 1.

²² Bhaktivedanta Swami, *Life Comes from Life: Morning Walks with His Divine Grace A.C. Bhaktivedanta Prabhupada*.

²³ A.C. Bhaktivedanta Swami, “Morning Walk -- May 14, 1973, Los Angeles (730514mw.La),” in *The Bhaktivedanta Vedabase (Version 2003.1)* (Sandy Ridge, N.C.: The Bhaktivedanta Archives, 2003).

²⁴ Bhaktivedanta Swami, *Life Comes from Life: Morning Walks with His Divine Grace A.C. Bhaktivedanta Prabhupada*, 60. The editors who had inserted a defense of the

Bhagavad-Gita into Bhaktivedanta's words had followed their guru's general point that scientists ought to rely on Vedic texts rather than empiricism.

²⁵ For thieves, see A.C. Bhaktivedanta Swami, "Morning Walk -- April 19, 1973, Los Angeles (730419mw.La)," in *The Bhaktivedanta Vedabase (Version 2003.1)* (Sandy Ridge, N.C.: The Bhaktivedanta Archives, 2003). For demons, Bhaktivedanta Swami, "Morning Walk -- May 14, 1973, Los Angeles (730514mw.La)." For animals, Bhaktivedanta Swami, "Morning Walk -- April 19, 1973, Los Angeles (730419mw.La)." For rascals, see all transcripts. For asses, A.C. Bhaktivedanta Swami, "Morning Walk -- December 3, 1973, Los Angeles (731203mw.La)," in *The Bhaktivedanta Vedabase (Version 2003.1)* (Sandy Ridge, N.C.: The Bhaktivedanta Archives, 2003).

²⁶ A.C. Bhaktivedanta Swami, "Morning Walk -- April 28, 1973, Los Angeles (730428mw.La)," in *The Bhaktivedanta Vedabase (Version 2003.1)* (Sandy Ridge, N.C.: The Bhaktivedanta Archives, 2003).

²⁷ Bhaktivedanta Swami, "Morning Walk -- April 19, 1973, Los Angeles (730419mw.La)."

²⁸ The non-devotee was Dr. W. H. Wolf-Rottkay, who recorded his observation in a correspondence sent to J. Stillson Judah, his friend and a scholar of new religious movements. Wolf-Rottkay wrote, "[t]he incident to which I was a personal witness during a morning walk was what I may be allowed to call the suggestion that physical violence of a most unpleasant type by applied to scientists 'tampering,' as it were, with the problems of life. Published, unfortunately, in the German edition of *The Scientific Basis of Kṛṣṇa Consciousness* (into which 'the Morning Walks' had been incorporated), the passage containing this utterance appears to have been, prudently, omitted in an ongoing preparation of an English edition of *The Morning Walks*. What a measure to be taken, however, namely to silence the Spiritual Master's voice because the tenor of his words is unfit for publication!" Dr. W. H. Wolf-Rottkay, "Dr. W. H. Wolf-Rottkay to Srila Prabhupada, 10/1975," (Letter, 1975) J. Stillson Judah: New Religious Movements Collection, GTU 95-6-01, The Graduate Theological Union Archives, Berkeley, CA.

²⁹ For other instances of Bhaktivedanta using similar statements, see the conversations from April 19: "Why is [new life] not coming now, rascal? I kick on your face with boots. Why it is not coming now?"; May 3: "We have to protest [Darwinian evolution] and kick them on their face. That should be our position"; May 15: "[The attempt to create life in laboratories] is rascaldom. That we kick out. That we kick on their face. You show what you have got just now"; Dec 3: "[Svarupa Damodara: But the scientists are now trying to make the seed.] Then kick on their face with boot. With boot, rascal. You are trying. That is rascaldom"; Dec 7: "[Scientists are] atheists, kick them on their face. Atheists, they are." Bhaktivedanta Swami, "Morning Walk -- April 19, 1973, Los Angeles (730419mw.La).", Bhaktivedanta Swami, "Morning Walk -- December 3, 1973, Los Angeles (731203mw.La).", A.C. Bhaktivedanta Swami, "Morning Walk -- December 7, 1973, Los Angeles (731207mw.La)," in *The Bhaktivedanta Vedabase (Version 2003.1)* (Sandy Ridge, N.C.: The Bhaktivedanta Archives, 2003), A.C.

Bhaktivedanta Swami, “Morning Walk -- May 3, 1973, Los Angeles (730503mw.La),” in *The Bhaktivedanta Vedabase (Version 2003.1)* (Sandy Ridge, N.C.: The Bhaktivedanta Archives, 2003), A.C. Bhaktivedanta Swami, “Morning Walk at Cheviot Hills Golf Course -- May 15, 1973, Los Angeles (730515mw.La),” in *The Bhaktivedanta Vedabase (Version 2003.1)* (Sandy Ridge, N.C.: The Bhaktivedanta Archives, 2003).

³⁰ Ellipsis in the original. Bhaktivedanta Swami, “Morning Walk -- April 19, 1973, Los Angeles (730419mw.La).”

³¹ See Kim Knott, “Healing the Heart of ISKCON: The Place of Women,” in *The Hare Krishna Movement: The Postcharismatic Fate of a Religious Transplant*, ed. Edwin Bryant and Maria Ekstrand (New York: Columbia University Press, 2004), Ekkehard Lorenz, “Race, Monarchy, and Gender: Bhaktivedanta Swami’s Social Experiment,” in *The Hare Krishna Movement: The Postcharismatic Fate of a Religious Transplant*, ed. Edwin Bryant and Maria Ekstrand (New York: Columbia University Press, 2004), Ekkehard Lorenz, “The Guru, Mayavadins, and Women: Tracing the Origins of Selected Polemical Statements in the Works of A.C. Bhaktivedanta Swami,” in *The Hare Krishna Movement: The Postcharismatic Fate of a Religious Transplant*, ed. Edwin Bryant and Maria Ekstrand (New York: Columbia University Press, 2004), Susan J. Palmer, *Moon Sisters, Krishna Mothers, Rajneesh Lovers: Women’s Roles on New Religions* (Syracuse: Syracuse University Press, 1994), 15-43. For a more personal take on the role of women in ISKCON and the nature of Bhaktivedanta’s treatment of gender, see the work of Nori Muster: Nori J. Muster, *Betrayal of the Spirit: My Life Behind the Headlines of the Hare Krishna Movement* (Urbana: University of Illinois Press, 1997), Nori J. Muster, “Life as a Woman on Watseka Avenue: Personal Story I,” in *The Hare Krishna Movement: The Postcharismatic Fate of a Religious Transplant*, ed. Edwin Bryant and Maria Ekstrand (New York: Columbia University Press, 2004).

³² The word “dasa” or “das” means “servant,” and the first name of each of the devotees represents an ideal or demigod within Gaudiya Vaishnavism. Hence, Yogesvara dasa means “Servant of the Lord of Yoga.”

³³ Jayadvaita dasa, “Biodata for Jayadvaita Swami,” http://www.jswami.info/jayadvaita_swami (accessed 7 February, 2007).

³⁴ Jayadvaita dasa, “Scarcity: The Fruit of Illusion,” *Back to Godhead* 1, no. 45 (1972): 23.

³⁵ *Ibid.*: 25.

³⁶ As Jayadvaita wrote, “the only real scarcity is a scarcity of genuine God consciousness. It is the mission of the International Society for Krishna Consciousness to counteract this scarcity, for that will automatically adjust all other problems.” *Ibid.*

³⁷ Hayagriva das Brahmachary, “Satan, Witches, and Homemade Gods,” *Back to Godhead* 1, no. 50 (1972): 28.

³⁸ Ibid.

³⁹ Ibid.: 30.

⁴⁰ Hayagriva invoked Vedic demonic typologies to categorize those who might disagree with him. “The *mayayaoahrta-jnanas* are intellectuals like scientists and philosophers whose erudite knowledge has been nullified by the influence of illusionary material energy.” The much more prevalent *mudha* demons, however, merely wished to enjoy the material life, and often lived “in suburbs.” They were “the gross fool who no doubt comprises the ninety-nine percent of mankind.” Ibid.: 31.

⁴¹ For details on Yogesvara dasa’s personal life, see the webpage associated with his newest book on fellow ISKCON devotee George Harrison: Yogesvara dasa, “Here Comes the Sun: The Author,” <http://www.herecomesthesunbook.com/press.author.html> (accessed 7 February, 2007).

⁴² Yogesvara dasa, “Primal Origins,” *Back to Godhead* 1, no. 67 (1974): 23.

⁴³ Ibid.

⁴⁴ The material produced by Christian Creationists provides a ready example, for example John Clement Whitcomb and Henry Madison Morris, *The Genesis Flood: The Biblical Record and Its Scientific Implications* (Philadelphia: Presbyterian and Reformed Pub. Co., 1961). For a Jewish analog, see Gerald L. Schroeder, *Genesis and the Big Bang: The Discovery of Harmony between Modern Science and the Bible* (New York: Bantam Books, 1992).

⁴⁵ Yogesvara dasa, “Primal Origins,” 25.

⁴⁶ Bali Mardan dasa, “Darwin’s Mistake,” *Back to Godhead* 10, no. 10 (1975): 10, Lapp, *The New Priesthood: The Scientific Elite and the Uses of Power*, 227.

⁴⁷ Bali Mardan dasa, “Darwin’s Mistake,” 12. For details on Christian and some Jewish opponents of Darwinism, see Ronald L. Numbers, *The Creationists* (New York: A. A. Knopf, 1992).

⁴⁸ Bali Mardan dasa, “Darwin’s Mistake,” 12.

⁴⁹ Ibid.: 13.

⁵⁰ Pancaratna das, Telephone Call to Author, 27 December 2006.

⁵¹ J. Frank Kenney and Pancaratna das, “An Experimental Course in Krishna Consciousness,” *Council on the Study of Religion Bulletin* 5, no. 5 (1974): 3.

⁵² Ibid.: 4.

⁵³ Ibid.: 3.

⁵⁴ Ibid.: 4.

⁵⁵ In my conversation with Pancaratna das, he also spoke of his personal attachment to Krishna Consciousness on the “rational” and “scientific” levels and not only the “experiential.” However, he also stressed that his teaching approach derived from the movement’s wider focus on science and not merely his own practices.

⁵⁶ International Society for Krishna Consciousness, “The Bhaktivedanta Institute,” (Brochure, 1974(?)) American Religions Collection, ARC Mss 1, Department of Special Collections, University Libraries, University of California, Santa Barbara.

⁵⁷ Svarupa Damodara dasa, *The Scientific Basis of Krsna Consciousness* (New York: Bhaktivedanta Book Trust, 1974), 58.

⁵⁸ Ibid., 8-10.

⁵⁹ William Paley, *Natural Theology; or Evidences of the Existence and Attributes of the Deity, Collected from the Appearances of Nature* (Trenton, N.J.: Daniel Fenton, 1824), 10-11.

⁶⁰ Svarupa Damodara dasa, *The Scientific Basis of Krsna Consciousness*, 12.

⁶¹ Ibid., 11.

⁶² Ibid., 15.

⁶³ Ibid., 18.

⁶⁴ Ibid., 24.

⁶⁵ Ibid., 27.

⁶⁶ Ibid., 22.

⁶⁷ For the section on Darwinism, see Ibid., 33-34. The quote on the completion and perfection of the Puranas comes from Svarupa’s defense of their divine origin, Svarupa Damodara dasa, *The Scientific Basis of Krsna Consciousness*, 41. He describes them as infallible throughout the text, but most particularly in the chapter, “Sastric [Vedic] Injunctions Are the Supreme Judgement,” Svarupa Damodara dasa, *The Scientific Basis of Krsna Consciousness*, 41-47.

⁶⁸ For details on the Puranas, see Sindhu S. Dange, *The Bhagavata Purana: Mytho-Social Study* (Delhi: Ajanta Publications, 1984), S.D. Kulharni, ed., *The Puranas: The Encyclopedia of Indian History and Culture* (Bombay: Shri Bhagavan Vedavyasa Itihasa, 1993), Ludo Rocher, *The Puranas* (Wiesbaden: O. Harrassowitz, 1986).

⁶⁹ These are the *Brahma-vaivarta Purana* and *Padma Purana*, portions of which Svarupa cites in Sanskrit and English. See Svarupa Damodara dasa, *The Scientific Basis of Krsna Consciousness*, 36-37.

⁷⁰ Ibid., 36-38.

⁷¹ Ibid., 46.

⁷² For details of ISKCON membership, including statistical breakdowns, see E. Burke Rochford, Jr., *Hare Krishna in America* (New Brunswick: Rutgers University Press, 1985), 43-85.

⁷³ Dharmadhyaksa dasa et al., "Spiritual Revolution," (Pamphlet, 1975) New Religious Movements Organizations: Vertical Files Collection, GTU 99-8-1, The Graduate Theological Union Archives, Berkeley, CA., 1.

⁷⁴ Ibid., 3.

⁷⁵ Ibid., 1.

⁷⁶ Ibid.

⁷⁷ Ibid., 3.

⁷⁸ For details on the development of ecology during the 1970s, see Stephen Bocking, *Ecologists and Environmental Politics: A History of Contemporary Ecology* (New Haven: Yale University Press, 1997), Anna Bramwell, *Ecology in the 20th Century: A History* (New Haven: Yale University Press, 1989).

⁷⁹ Accusations of brainwashing and coercion have generally proven false, as demonstrated by the first generation of scholars of new religious movements. James T. Richardson, "The Brainwashing/Deprogramming Controversy: An Introduction," in *The Brainwashing/Deprogramming Controversy: Sociological, Psychological, Legal, and Historical Perspectives*, ed. David G. Bromley and James T. Richardson, *Studies in Religion and Society* (New York: The Edwin Mellon Press, 1983), Thomas Robbins and Dick Anthony, "New Religions, Families and Brainwashing," *Society* 15, no. 4 (1978). One of the major arguments against such accusations of brainwashing is the qualitative data gathered from "exit interviews" with former ISKCON members conducted by sociologists. See Stuart A. Wright, "Post-Involvement Attitudes of Voluntary Defectors from Controversial New Religious Movements," *Journal for the Scientific Study of Religion* 23, no. 2 (1984). One of the few academic defenders of the brainwashing hypothesis, Benjamin Zablocki has proposed retooling the concept in light of new sociological research. Benjamin Zablocki, "Toward a Demystified and Disinterested Scientific Theory of Brainwashing," in *Misunderstanding Cults: Searching for Objectivity in a Controversial Field*, ed. Benjamin Zablocki and Thomas Robbins (Toronto: University of Toronto Press, 2001). Finally, David Bromley considers such accusations as forms of competing narratives of conversion: David G. Bromley, "A Tale

of Two Theories: Brainwashing and Conversion as Competing Political Narratives,” in *Misunderstanding Cults: Searching for Objectivity in a Controversial Field*, ed. Benjamin Zablocki and Thomas Robbins (Toronto: University of Toronto Press, 2001).

⁸⁰ Ellipses in the original. Dharmadhyaksa dasa et al., “Spiritual Revolution,” 3.

⁸¹ Ibid., 4.

⁸² Interestingly, of these four scientists, three worked in the field of general relativity, with Einstein as one of its founding fathers, Eddington a leading experimental researcher, and Jeans a popularizer. J.B.B. Haldane worked in population genetics. Though ISKCON’s positive valuation of the work of Haldane might have stemmed from his a large-scale statistical analysis, which viewed individual human actions as probabilistic rather than predetermined, the brief article did not dwell on his work. Nor did it explain the relevance of relativity to Krishna Consciousness. Rather, the author incorporated these scientists as examples of scientific supporters of the Hare Krishna perspective that consciousness derived from the non-material soul, the “anti-material particle” as Bhaktivedanta called it. Ibid.

⁸³ Ibid.

⁸⁴ For details of the “post-charismatic fate” of ISKCON, as many scholars have called it, see the later half of Bryant and Ekstrand compilation, *the Hare Krishna Movement*, particularly chapters 10-15. Edwin Bryant and Maria Ekstrand, eds., *The Hare Krishna Movement: The Postcharismatic Fate of a Religious Transplant* (New York: Columbia University Press, 2004). A somewhat shorter account is provided by Steven J. Gelberg, “The Call of the Lotus-Eyed Lord: The Fate of Krishna Consciousness in the West,” in *When Prophets Die: The Postcharismatic Fate of New Religious Movements* (Albany: State University of New York Press, 1991).

SECTION III: SCIENCE AND HEAVEN'S GATE

“Remember, we’re not talking about a spiritual kingdom—no clouds, no harps—even though we are talking about in the heavens. But the Heavens are no more spiritual than when you go out at night and look at the Heavenly bodies and see them. They are literally there. They are physical.”

-- Marshall Herff Applewhite, *Planet About to Be Recycled* (1996)

INTRODUCTION TO SECTION III

“The telescope must be defective,” the Heaven’s Gate member told the clerk, “and we want a refund.” So tells a oft-repeated internet rumor that circulated after the mass suicides that claimed the lives of the thirty-nine members of Heaven’s Gate. The story claimed that a few weeks before the suicides that effectively ended the group’s existence, several members of the movement had purchased a high-powered telescope so that they could search the heavens for the UFO that they hoped would transport them away from Earth. But being unable to find the UFO, they returned the telescope a few days later. When the manager asked what was wrong with the device, the story tells, the Heaven’s Gate members reported the telescope as clearly defective, since they couldn’t find the UFO. Though this tale cannot be substantiated, it does reveal a central tenet of the group known as Heaven’s Gate: its insistence that the absolute truths of the universe are provable and they could prove them. Even God, the members of the group insisted, possessed a physical form that a suitably powerful enough telescope might eventually locate. However, the story also reveals the underlying religious nature of the group: faith ultimately trumped proof. The telescope did not reveal a UFO, but the members of Heaven’s Gate did not change their beliefs that a UFO would whisk them away into the heavens. They returned the telescope. The rumor is probably false, but it is believable because it reflects the group’s values.¹

“Our message is not now, nor has it ever been, religious or spiritual,” declared the individual calling herself Anlody, a few months before the mass suicide that claimed her

life, along with those of her thirty-eight coreligionists in the movement eventually called Heaven's Gate.² The message was not religious, Anlody insisted, though her own statement containing those words also discussed the human soul, the "Chief of Chiefs," Lucifer, the Tree of Life, and eternal salvation. However, in the mind of Anlody and her fellow members of Heaven's Gate, the eternal fate of her soul did not qualify as a religious or spiritual concern. In a parallel development, Anlody's compatriot and leader, who called himself Do (pronounced 'doe') declared of his movement, "[t]his is as scientific—this is as true as true could be."³ Yet, the 'scientific truth' that Do discussed in the video in which those words appeared included extra-sensory perception, spirits, and biblical prophecy, extra-terrestrials, and the nature of Jesus' resurrection. Such is the irony of a group that fits most scholar's assumptions about a religion, but itself demonstrated only a tepid ambivalence towards the category of religion.⁴

Within Heaven's Gate, science and religion coexisted as unequal binary opposites. Science, the movement's members insisted, represented truth, rationalism, reasonability, and the reliance on evidence. Religion, by contrast, possessed falsehood, emotionalism, nonsensibility, and reliance on faith. The former category surpassed the latter in every regard, they argued, and therefore the adherents of the group known as Heaven's Gate positioned themselves as a science. Yet in term of content, function, and the groups with which it competed, Heaven's Gate certainly qualified as a religion. For example, their worldview centered on salvation, creation and the Creator, the nature of the soul, and the Bible. The group adapted religious practices from the New Age religious subculture, such as diet regimentation, meditation, and channeling. And in their own words, they reached out to "ministers, evangelists, and [New Age] awareness

centers.”⁵ Heaven’s Gate accepted that it was a religion, but wanted to be more like a science.

Heaven’s Gate belonged to a category of new religions generally called “UFO cults” or “UFO religions.” Such groups often adopt a particular treatment of science and its relation to religion that Heaven’s Gate typified: the valuation of science and scientific concepts and the subsequent appropriation of science into their religious worldviews. Christopher Partridge, in his essay on “Understanding UFO Religions and Abduction Spiritualities,” wrote that UFO religions and spiritualities “are distinctive in that, to one degree or another, they claim to offer a ‘scientific’ belief system.”⁶ Partridge correctly indicated that UFO-centric groups ranging from the Aetherius Society to the Raelian Church make this claim, and though Partridge did not mention Heaven’s Gate in this context, its leaders and members also claimed to offer a scientific belief system. Brenda Denzler has explained this phenomenon similarly, in her study of self-declared contactees (people who claim to have contacted extraterrestrials) and ufologists (people who study UFO phenomenon). Denzler explained that “God-talk [among the contactees] was often conducted using the rhetoric of science rather than religion and sought to touch base not with the verities of revealed Truth, but with the verities of empirically derived truth.”⁷ The contactee groups that Denzler considered shared with other UFO groups a fixation with the scientific, the material, and the empirical.

One manner in which UFO religions demonstrate their scientific nature is through offering materialistic reinterpretations of what religions traditionally have understood as supernatural topics. The Raelian Church, for example, recast the idea of resurrection as genetic cloning, and around the turn of the millennium made the pursuit of cloning

technology a cornerstone of their movement's mission.⁸ The movement called Unarius identified angels as extraterrestrial space beings who communicated with humans using telepathic abilities, and looked to these aliens as fonts of knowledge, guides, and messengers from the heavens.⁹ Both examples demonstrate that UFO religions offer materialistic explanations for religious topics, resurrection and angels respectively.

By "materialism" I do not mean the lusting after wealth or goods, but a treatment of all knowledge and knowable things as comprised of physical, tangible matter, as described by the sciences of physics, chemistry, and related fields. A closely allied concept, "naturalism," treats all knowledge as derived from the physical, tangible universe that human beings can access through their five senses. Naturalism holds that the physical laws of science can describe all things without recourse to divine beings, miracles, or unseeing and unknowable events. Both terms as I use them are methods of knowing, or epistemologies. What I call materialistic interpretation, Partridge calls physicalism. He wrote, "[w]hilst much of UFO religion contains typically religious themes, including the belief in God, salvation, reincarnation, karma and so on, we have seen that it is also 'physicalist.' That is to say, whilst the components of a religious worldview may be there, they are often reinterpreted in terms of physical phenomenon."¹⁰ John Saliba, referring specifically to Christian UFO religions, concurred: "they remove the supernatural: the miraculous (supernaturally produced) events in the Bible become activities of superhuman beings from other planets, who possess superior technological and psychic powers."¹¹ Heaven's Gate's founders and members exhibited precisely this type of reinterpretation. Christ became an extraterrestrial, the Bible a set of instructions from outer space, resurrection a biological process, and eventually they transformed even

the Christian concepts of grace into a tag or tracking device. Especially in the first decade of Heaven's Gate's history, the production of a materialistic religious worldview dominated the group's founders.

Unlike the Unification Church or the Hare Krishna movement, Heaven's Gate did not explicitly consider the definition or meaning of science vis-à-vis religion until very late in its history and development. Unlike those groups, which posited themselves relative to science by either seeking to guide or replace it, Heaven's Gate attempted to absorb the best of science into itself. For that reason, the group said little about science until its final years, but throughout its history tried to "be scientific" by offering naturalistic, materialistic explanations of religious concepts. Heaven's Gate's founders and leaders incorporated methodological naturalism and materialism into their religion. Stripping supernaturalism from religion and replacing it with materialistic explanations, Heaven's Gate demonstrated how a religious group could seek to *absorb* science into religion.

¹ Several examples of this rumor are still available on the internet at the time of this writing. Cliff Bostock, "Heaven's Gate: Some Brief Questions and Observations from a Depth-Psychological Perspective," http://www.soulworks.net/writings/essays/site_008.html (accessed 2 February, 2007), Simpos, "Heaven's Gate Mass Suicide," <http://www.stelling.nl/simpos/heavgate.htm> (accessed 2 February, 2007).

² Anlody, "Investments," in HGA, sec. A, 98-100 (Originally Produced 1996).

³ Heaven's Gate, "Planet About to Be Recycled—Your Only Chance to Survive—Leave with Us [Edited Transcript]," <http://www.heavensgate.com/misc/vt100596.htm> (accessed 13 November, 1997 [Defunct]).

⁴ It is certainly not my intention to enter into the debates over the definition of religion. Certainly scholars differ on how to define the concept, and I only wish to note here that according to most definitions with which I am familiar, Heaven's Gate is a religion.

⁵ Heaven's Gate, "'88 Update," in HGA, sec. 3, 2-19 (Originally Produced 1988).

⁶ Christopher H. Partridge, *UFO Religions* (London: Routledge, 2003), 37.

⁷ Brenda Denzler, *The Lure of the Edge: Scientific Passions, Religious Beliefs, and the Pursuit of UFOs* (Berkeley: University of California Press, 2001), 106-07.

⁸ See Susan J. Palmer, *Aliens Adored: Rael's UFO Religion* (New Brunswick, N.J.: Rutgers University Press, 2004).

⁹ See Diana Tumminia and R. George Kirkpatrick, "Unarius: Emergent Aspects of an American Flying Saucer Group," in *The Gods Have Landed: New Religions from Other Worlds*, ed. James R. Lewis (Albany: State University of New York Press, 1995).

¹⁰ Partridge, *UFO Religions*, 21.

¹¹ John A. Saliba, "Religious Dimensions of UFO Phenomena," in *The Gods Have Landed: New Religions from Other Worlds*, ed. James R. Lewis (Albany: State University of New York Press, 1995), 34.

CHAPTER 5: SCIENCE AND HEAVEN’S GATE UNTIL 1985

The Origins of Heaven’s Gate: “The Two”

Heaven’s Gate grew from the nexus of two founders: Bonnie Lu Nettles (1928-1985) and Marshall Herff Applewhite (1932-1997). Of the movement’s leaders, scholars know less about Nettles’ personal life before her co-founding of the group. A native of Houston, Nettles was a registered nurse, mother of four children, and partner in a failing marriage. Though raised a Baptist, a junior high school classmate of Nettles described her as not particularly religious, attending church “just because the gang [of friends and family] did.”¹ She had dropped out of Christian circles by the time she became an adult. In the years preceding her first meeting with Applewhite, she wrote occasional newspaper columns on astrology and spoke of receiving assistance in her astrology from spiritual beings. She belonged to the Houston branch of the Theosophical Society in America and expressed an interest in the writings of H.P. Blavatsky, one of the founders of the theosophical movement.² The secondary scholarship on Nettles shows her as inhabiting a New Age subculture of disincarnated spirits, ascended masters, telepathic powers, and hidden and revealed gnosis. As sociologist Robert W. Balch, who studied and traveled with the group in its early years, wrote, “Bonnie was deeply committed to metaphysics as a way of life. Hers was a magical reality of signs, omens, spirits, ascended masters, and higher levels of reality.”³ A fascination with spirits and the spiritual would carry over into Heaven’s Gate, though Nettles and her co-founder would eventually treat the idea of the ‘spiritual’ with reticence and even suspicion.

Scholars have termed the religious subculture that Nettles inhabited the New Age, but the category itself includes so many variants that it provides little analytic traction. Three of the leading scholars of the New Age in America, J. Gordon Melton, James R. Lewis, and Sarah M. Pike, concur that personal transformation marks one of the few characteristics around which the many variants of the New Age converge.⁴ Developing that commonality, Pike characterizes the New Age movement as “committed to the transformation of both self and society through a host of practices that include channeling, visualization, astrology, meditation, and alternative healing methods.”⁵ One of the problems in defining the New Age is its “spiritual eclecticism,” as Pike puts it. Lewis has rightly characterized the New Age movement as an amorphous decentralized collective, focused primarily on healing and self-improvement, but encompassing a variety of methods and foci. Like Pike’s description of the varieties of New Age commitments, Lewis applies a Wittgensteinian family relationship model in describing the New Age genre, a technique recommended by Eileen Barker for the study of the New Age.⁶ Under this model a member of the family need not possess all of the possible attributes, but is nonetheless part of the wider category. Lewis offers several traits as central to the New Age family: “emphasis on healing; a desire to be ‘modern’ and use scientific language; eclecticism and syncretism; a monistic and impersonal ontology; optimism, success orientation, and a tendency to evolutionary views; emphasis on psychic powers.”⁷ Nettles brought most—though not all—of these traits into Heaven’s Gate. Most pertinently, the movement shared with the New Age the desire to use scientific language and to appear “modern,” though it had its own reasons for doing so.⁸

Despite these New Age influences, Heaven’s Gate grew out of Christianity as

well, through the vector of Nettles' co-founder Marshall Herff Applewhite. Known as Herff to his friends, Applewhite possessed a more conventionally Christian background than did Nettles. A Texan by birth, his father served as a popular and successful Presbyterian preacher, having founded and led several churches in the state. After college the younger Applewhite enrolled at Virginia's Union Theological Seminary, a Presbyterian divinity school, but left after two years to study music.⁹ It is possible that Applewhite departed seminary because he discovered himself to be a homosexual, although he stressed his vocational shift in telling his own history.¹⁰ He earned a Masters degree in music and voice from the University of Colorado, though never strayed far from a religiously oriented vocation. A talented vocalist and charismatic instructor, Applewhite directed the chorus at Houston's St. Mark's Episcopal Church and the fine arts program at the Catholic University of St. Thomas, but seemed not to identify strongly with any particular denomination in his adult life.¹¹

Though Applewhite and Nettles brought different religious backgrounds to what would become Heaven's Gate, they did share a common social and cultural background. Unlike the founders of the Unification Church and ISKCON, foreigners who brought new doctrines to America, Bonnie and Herff were native-born Americans who transformed American religious traditions—the New Age and Protestant Christianity—into something new. Unlike the young college students who joined the Unification Church or the drop-outs who followed Bhaktivedanta, the two founders of Heaven's Gate were middle-class adult Americans. However, like the counterculture, Applewhite and Nettles rejected white middle class American norms. Though they gave up on American culture, they did not seek to import an Asian alternative, as did the Hare Krishnas. Heaven's Gate

accepted the scientific and ideological foundation of the West (naturalism and science), but turned against American values such as the family, work-ethic, education, and recreation.

When Nettles and Applewhite met in the spring of 1972 at the Houston hospital where Nettles worked when both were in their mid-forties and in the throes of significant life changes.¹² Nettles was separated and soon to be divorced; Applewhite, a divorcee with two children, had floundering through a sexual relationships with both men and women. Rejecting the aspect of their lives that they had found most unsettling—their marriages and sexual relationships—Nettles and Applewhite formed an intense spiritual, though by all accounts platonic, relationship. While reductionist readings of Heaven’s Gate portrayed Applewhite’s and Nettles’ muddled sexuality as prime causes for the eventual emergence of the extreme sexual asceticism that characterized the movement, the worldview of Heaven’s Gate demonstrated a complexity that complicates such analyses.¹³ There is little doubt that the co-founders’ rejection of their sexual natures strongly influenced the new religion, but other factors did as well.

Shortly after their initial meeting, Applewhite and Nettles came to understand one another as spiritual partners destined to teach about religious and spiritual topics. To this end, they founded a small religious enterprise, called the Christian Arts Center, in borrowed space from a local church. The two hoped to use the Christian Arts Center, and later a second venture called Know Place, to teach “classes in metaphysics, theosophy, [and] astrology,” they explained.¹⁴ Balch added that they also intended to offer courses in mysticism, healing, comparative religion, and the performing arts, and hoped to “promote the study of music, arts, and religion” broadly.¹⁵ The two’s grand vision failed to achieve

success, and the Christian Arts Center closed after encountering animosity among the local Christian community and financial instability. Applewhite and Nettles' second venture, Know Place, reproduced the same pattern, though with a more explicitly theosophical or occult angle than their earlier attempt. The Know Place also failed to achieve financial success, and the two closed it in January, 1973.¹⁶

A three-year period of wandering and religious formulation ensued (1973-75), during which Nettles and Applewhite traveled throughout the United States and ruminated on what religious message they hoped to bring to the world. Applewhite and Nettles explored numerous religious options, which included meditating on St. Francis of Assisi, how their contemporary society might respond to the second coming of Jesus, and the nature of reincarnation and disincarnate spirits.¹⁷ In their own words, Nettles and Applewhite explained that they “studied the Bible more thoroughly than we had before in our separate studies. We studied the secret doctrine of Madame Blavatsky, which is theosophical material. We studied everything we could get our hands on that had to do with any sort of awareness—spiritual awareness, scientific awareness, religious awareness. Our thirst was absolutely unquenchable.”¹⁸ Though the two did not specify what sort of “scientific awareness” they sought, or even what such an awareness entailed, their inclusion of science alongside religion and spirituality harbingered the place of science in their later thought.

During their errand into the wilderness the two leaders flushed out the specifics of their message, but by no later than June 5, 1974 (a year and a half after their journey began) they had settled on the fundamentals. Max Pavesic, a Boise State University anthropology professor, and Johnny Lister, a Boise area psychic, each reported that on

that day the two arrived unannounced at their offices, introduced themselves as Bonnie and Herff, and asked them to “drop everything and leave with them.” Lester indicated that the two individuals revealed that “they would be crucified” so as to prove their mission as legitimate, and Pavesic added that they explained “their idea of attaining to the highest level of evolution... a metaphysical state where the mind is evolved out of the body into infinity.” Neither Pavesic nor Lister accepted the offer, and the two travelers departed.¹⁹

When they next emerged later that year, the two had transformed themselves into “the Two,” or sometimes the “UFO Two,” as they called themselves. (They later rechristening themselves as Guinea [Nettles] and Pig [Applewhite], Bo [Applewhite] and Peep [Nettles], and finally Ti [Nettles] and Do [Applewhite].)²⁰ The Two proclaimed a specific message of salvation that combined Christian millennialism, New Age self-improvement, and the religious dimensions of extra-terrestrials and unidentified flying objects (UFOs). The possibility of individual salvation and bodily assumption into heaven provided the heart of the Two’s teachings, alongside a prophesied “demonstration” wherein the two teachers would be assassinated, resurrect themselves after three and a half days, and then rise into the heavens. In order for potential followers to join them in this “trip,” as they called it, they needed to leave their human attachments behind them and dedicate themselves exclusively to overcoming the human condition. Such dedication combined with absolute faith in the Two and their message would ensure those who followed Applewhite and Nettles would also rise into the heavens and achieve eternal salvation. Their teachings combined influences from the New Age and Protestant Christianity with an explicitly escapist view of the world, one that demonstrated their

rejection of the very society that the two middle-age middle-class Texans had represented.

Sometime after their encounter with the professor and psychic in Idaho, the Two set to work writing a set of three statements that codified this religious message. (The dating is somewhat unclear here, but they had completed the first of the statements by March, 1975 at the latest.²¹) Throughout the autumn of 1975, the Two distributed the statements to those who attended their meetings and mailed them more widely to individuals and groups associated with New Age institutions (health food stores, yoga groups, independent bookshops, etc.). The first of these dense single-spaced typewritten statements, a one page document labeled “Your Opportunity: Statement #1” carried the title “Human Individual Metamorphosis,” and described the goal of the Two’s process, namely the physical transformation of a human being into a perfected extraterrestrial creature. The second, “Clarification: Human Kingdom – Visible and Invisible,” detailed the nature of spirits, souls, and the means by which individuals spiritually evolve towards an extraterrestrial goal. The third, “The Only Significant Resurrection,” reiterated the first two statements with explicit comparisons to the Christian concept of bodily resurrection. They signed each “H.I.M.” short for Human Individual Metamorphosis, the name they had chosen for their teachings. Overall, the three statements aimed to demonstrate an understanding of individual bodily transformation into an extra-terrestrial being as equivalent to personal evolution, resurrection, and eternal salvation. A close analysis of their gospel as described in the three statements reveals a rephrasing of religious concepts in the language of ufology and materialistic naturalism, as well as an underlying distrust of religious approaches that relied upon supernatural rather than

naturalistic language and approaches. Though it would take years before the Two developed a more formal approach to how religion ought to absorb science, their earliest statements implied their tremendous valuation of the materialistic naturalism that roots science and scientific language.

The Two's first statement, "Human Individual Metamorphosis," began with an assumption that their own H.I.M. process and teachings agreed with the foundation of other religions, but also a disparaging dismissal of those competing religions: "What religions have sought to understand since the beginning of their origin is what is above the human level of existence. Most have taught that if an individual lives a 'good life' adoring some savior that he will inherit some 'heaven' after his death. If only it were that simple." The heavily sardonic "some savior" and "some 'heaven,'" as well as the offsetting of "good life" within quotes revealed the authors' thinly veiled disagreement with what they regarded as the "simple" Christian teachings.²² Years later, Heaven's Gate would utilize much the same language, and explicitly note that its own approach differed because it was scientific, but the first (surviving) written material authored by Applewhite and Nettles already indicated a disparaging view of at least the Christian religion.

The "Human Individual Metamorphosis" statement continued, laying out the basic religious message of the Two: there existed a "next evolutionary kingdom," "next kingdom," or "next level" to which a human could physically journey and join, provided that he or she "completely overcomes all the aspects and influences of the human level." The statement itself did not indicate what this process entailed, but in their subsequent teachings, the Two specified the need to reject emotional and sexual attachments to other

human beings as a primary objective. Nettles and Applewhite employed a biological metaphor to explain their teachings, that of the caterpillar's metamorphosis within the chrysalis into a butterfly. Just as if a caterpillar "rises above all caterpillar ways, converts all his energies to the pursuit of becoming literally another creature who circulates in another world, he becomes a butterfly," so too could human beings transform themselves into extraterrestrial creatures.²³ Nearly every source produced in the early years of the group that would come to call itself Human Individual Metamorphosis and later Heaven's Gate repeated this metaphor and approach: the process of overcoming one's humanity and transforming into an alien creature paralleled that of a caterpillar turning into a butterfly, alongside the recognition of some shared attributes.²⁴

The chrysalis metaphor offered Bo and Peep a natural and materialistic explanation of the process that they also maintained operated on a purely material and biological level, rather than a spiritual or supernatural one. The "Human Individual Metamorphosis" statement made this clear, declaring of those who successfully completed the overcoming process that "[w]hen the metamorphosis is complete their 'perennial' and cyclical nature is ended for their 'new' body has overcome decay, disease and death. It has converted over chemically, biologically, and in vibration to the 'new' creature."²⁵ That the conversion included a change in "vibration" particularly situates Nettles and Applewhite's material within the New Age, which frequently utilizes the concept of vibrations to describe a person or object's characteristics.²⁶ Yet the reference to chemical and biological transformation also reveals the Two's materialistic assumptions. Whatever else, the salvific process that Applewhite and Nettles offered was

physical and natural, “chemical” and “biological,” and not merely spiritual, symbolic, or supernatural.

Following the transformation, Nettles and Applewhite explained, the newly transformed creatures would join the Two, who would also metamorphose, and journey into the heavens aboard a UFO. Rather than a spiritual transformation of the soul that might occur after death, or a resurrection of the flesh in a far-distant future time, or even a reincarnation into a new body, Bo and Peep promised of their process that it acted immediately and physically, without the need to disembodify or die in order to achieve entrance into the heavens. The Two’s vision of a material form of salvation, that is a chemical and biological one, explained their dismissal of “some heaven” and “some savior” that opened the statement: Human Individual Metamorphosis’s heaven existed in the physical skies, its salvation an embodied physical one achieved through metamorphosis of a living human being into a living extraterrestrial. Again, though the Two did not explicitly discuss science, they implied support for its materialistic and naturalistic foundations. They also distanced themselves from the this-Earthly focus of much of middle-class America, situating themselves as a movement opposed to such terrestrial concerns.

The remainder of the “Human Individual Metamorphosis” statement retold the story of Christ within the religious paradigm that the Two had established. The authors explicitly attempted to naturalize the events in Jesus’ life, to show them to indicate the material and biological nature of salvation, and link them to their identification of the physical extraterrestrial heavens as heaven. Immediately following their declaration of the chemical and biological conversion of the body, they wrote:

Approx. 2,000 years ago an individual of that next kingdom forfeited his body of that kingdom and entered a human female's womb, thereby incarnating as the one history refers to as Jesus of Nazareth. He awakened to this fact gradually through the same metamorphic process and came to know that he had incarnated for the express purpose of telling and showing, even to the point of proof, that the next kingdom can be entered by overcoming the human aspects and literally converting into a "man" or creature of that kingdom.²⁷

Christ's teachings, in other words, paralleled their own. Jesus came to teach that humans could overcome their natural condition and enter the next kingdom. Yet beyond the similarities between the content of their messages, Applewhite and Nettles also indicated the biological and physical nature of Christ's incarnation: the extraterrestrial that was to become Jesus, they explained, put aside a body in the heavens, took a body on Earth, then awoke to his mission through the "same metamorphic process" that the Two insisted anyone might undergo. In other sources, especially the interviews they granted to two UFO researchers a year later in 1976, the Two would explicitly link their own experiences of incarnating and awakening to that of Christ, further strengthening their identification of Christ's incarnation as a physical transfer of an individual between bodies. In the material heavens, somewhere beyond the atmosphere of Earth but still within the physical universe, Christ gave up a physical body in order to incarnate.²⁸

Nettles and Applewhite insisted that the material and biological transformation of the physical body represented the sole way that an individual could enter heaven, and that therefore the being known as Jesus of Nazareth demonstrated that reality. After the crucifixion, the "Human Individual Metamorphosis" statement explained, Christ "did not leave His body in the grave. He converted it *into* His body of that next kingdom. This is the only way the next kingdom is entered permanently. Each human has that full potential."²⁹ In order to demonstrate that potential, the authors explained, Christ stayed

on Earth in order to continue teaching his disciples, to show them his next level body and “demonstrated a few of its new attributes, i.e. appearing and disappearing (changing His vibrations) before their eyes while letting some of His friends touch His ‘new’ body.” Like the first century gospel writers and early Church Fathers, the Two labored to convince their readers that Christ’s resurrected in physical form, not merely spiritual or symbolic. Unlike them, however, the two founders of Human Individual Metamorphosis (later Heaven’s Gate) insisted that Christ had transformed himself into a new body, an extraterrestrial next level body, in order to show his disciples what they too might possess. Having completed his mission, the Two explained, “Jesus left them in a cloud of light (what humans refer to as UFOs) and moves and returns in the same manner.”³⁰

The parenthetical equation of the UFO and the cloud of light paralleled both the earlier parenthetical reference to “appearing and disappearing (changing His vibrations)” and another in the first statement, “His [Christ’s] transfiguration (metamorphic completion),” an apparent reference to the Transfiguration event described in the gospels.³¹ The three parentheticals revealed the Two’s approach of translating traditionally religious concepts into more materialistic, physical, and even scientific language. Salvation became a chemical and biological process of transforming *homo sapiens* into extraterrestrials. Heaven itself, they insisted, existed in the physical heavens reachable through mundane space travel. In another source from approximately the same time period, they explained that the figure Christians call Lucifer or Satan actually was an extraterrestrial, a living biological being who had “displeased the Chief by getting into his own ego trip” with the consequence of Lucifer’s banishment to planet Earth.³² By the time that Human Individual Metamorphosis itself metamorphosed into Heaven’s Gate,

the movement described the Christian concept of grace as an implanted chip, prayer as a type of radio transmission, and the miracles described in the Bible as technological wizardry.

Applewhite and Nettles' second statement, the one page "Clarification: Human Kingdom—Visible and Invisible" offered a defense of the nature of disincarnated spirits. In keeping with their previous attempts to portray the H.I.M. process as materialistic and biological, the Two invoked a number of metaphors and explanations to clarify the nature of the spirit of soul, which they believed progressed in an individual evolution from animal to human and perhaps to the next level, with intermediary steps as a "disincarnate," or free-floating spirit. The second statement employed three central metaphors: the chrysalis, primary school education, and the hours of the day, often jumbled together. Through these three techniques, the authors attempted to portray their notion of disincarnate spirits as entirely natural, again with parenthetical remarks equating their religious concepts to a scientific ones. One section of the statement declared:

Every individual who is now a human has by the force of his will survived in an "upward" motion (evolved) and entered the human kingdom as a primitive human. Each has his first grade experience equivalent to a bushman, aborigine, or similar primitive group and works his way "up" according to the strength of his will. A way of understanding this process is to think of his cycles as twelve grades in school applied to the twelve hours on the clock. Each human comes into the human kingdom at one o'clock but may remain there, work his way up, or even skip grades according to the choice and strength of his will. ... Those spaces between numbers of the clock or grades in school are periods when he is between incarnations.³³

Having attempted to convince their readers that disincarnate spirits were as mundane as the times of the day or grades of a school, the Two returned to their central point, that

human beings needed to overcome their human attachments in order to progress to the next kingdom level. Using very similar language to the first statement, the second statement concluded with an encouragement to leave the influences of the disincarnates behind, and to avoid the fate of becoming one oneself, by a “total metamorphosis—becoming a member of that next kingdom—not to need know death [sic] or incarnate again.” Repeating what readers of the first statement would recognize as an established position, the second statement declared, “[n]ow, at the close of this age, we are at the same equivalent time-space that the civilized community was 2,000 years ago when Jesus taught and illustrated this process. It is graduation time for all levels of life forms. The doors of the next kingdom are open ... Why not you?”³⁴

The two-page long “Statement #3: The Only Significant Resurrection,” returned to explicitly religious concepts, and in doing so attempted to distinguish H.I.M. from its religious competitors. The statement attempted, in the words of its authors, to “present a concept factually and bypass the usual hidden and symbolic implications of the words used.” Though Nettles and Applewhite did not indicate to which hidden and symbolic implications they objected, they did explicate the pertinent word: resurrection. The third statement began with a summary of various religious understandings of resurrection, particularly those associated with Christianity and the New Age.

To some, “resurrection” means that great event in “judgment time” when souls who have lived the “good life,” or who have “accepted Christ as their personal savior,” will “rise from the grave” to “ascend into Heaven.” To others, it signifies the time when their “spirit” rises into “Heavens” after their bodies have been put “to rest.” For a few, it is the occasion when a “light body” is acquired after much meditation. For still others, resurrection is the time when the decomposing body is recycling “life” at the beginning stages.³⁵

Though each of these understandings possessed some truth and value, the Two insisted that only they offered the true and “ultimately important” meaning of resurrection. (They made similar statements elsewhere, that all religions had value but only their approach worked the best.) The Two rejected the Christian concept of resurrection, which required both the mediation of a savior as well as the death of the individual. The Two also dismissed theosophical or occult perspectives, which required esoteric knowledge not easily acquired. “The resurrection being discussed is simple to understand since it is not attained through the study of symbology or the ‘wisdom’ of the ‘hidden mysteries,’” they insisted, offsetting the suspect words within quotes. Instead, they offered what they considered true resurrection, a chemical and biological transformation into an extra-terrestrial and ensuing “membership in the next evolutionary kingdom, the actual kingdom of heaven, or space.”³⁶

Unlike how they viewed Christian or occult views of resurrection, the former of which relied on “some savior” to achieve “some heaven” (in the words of the first statement), and the latter of which relied upon “hidden mysteries,” the Two declared that their Human Individual Metamorphosis offered salvation predicated on “chemical conversion” into a living next level being. Should a person accept the overcoming process that the Two offered, they insisted that it would result in automatic conversion into an eternal perfected being. “The painful and long-suffering experience of overcoming fear and desperation, which every seeker undegoos [sic], actually converts the cells of his body, chemically and biologically, into a new body. Upon the completion of his conversion experience that new body will have overcome decay and death.”³⁷

Physical and material transformation, rather than spiritual or supernatural salvation,

provided the key to the Two's schema of resurrection, a fact that the Two trumpeted in all of their early materials.

Though the two founders of H.I.M. did not explicitly declare their approach a science in their first three statements, they built the foundation for this position in their materialism and insistence on the biological and chemical nature of their promised metamorphosis, frequently employing two terms, "biology" and "chemistry," that most readers would easily identify as scientific. The repeated description of the metamorphic process as biological and chemical, as well as the use of the terms metamorphosis and transformation rather than reincarnation, rebirth, or salvation all indicate their materialistic approach to what most people would consider a clearly religious topic: eternal salvation and entrance into heaven. Though Heaven's Gate would later imply a fundamental break between religion and science, the Two's materials in the mid-1970s indicate their understanding of a continuum between the two, if not an outright overlap. For example, a brief one page update called "What's Up?" that they disseminated in July 1975 began with the same sort of assumed commonalities between religion and science that they also revealed in their first statement. "At this particular time," it began, "fictional writers, religious scholars, spiritual leaders, fundamentalist preachers, scientists, and illustrators are expressing their interpretations of what is 'happening.' Something is unique about this time span which seems to have more urgency than the various interpretations can explain, ... and people are interpreting that change according to their comprehension." Everyone from scientists to fundamentalists tried to understand the world around them, Applewhite and Nettles maintained, and though only some of

these individuals experienced the “accelerated awareness” that led to the truth, scientists and religionists alike tried to explain the “severe change taking place.”³⁸

Human Individual Metamorphosis and the Anti-Religious Turn

Nettles and Applewhite continued to travel around the country until spring 1975, when they encountered their first major success in gaining converts to their process. Speaking to a meeting of a Los Angeles area New Age group on April 9, 1975, the Two—then going under the names Guinea (Nettles) and Pig (Applewhite)—convinced twenty-four of the about fifty people attending the meeting to abandon their previous lives and connections and strive to overcome their human condition.³⁹ Though all but one of these converts subsequently left, the experience provided enough momentum to make the Two leaders of a small new religious group.⁴⁰ Human Individual Metamorphosis had grown from a process extolled by two proponents into a new religious movement. The Two achieved another major success on September 14, 1975, when according to newspaper accounts, they attracted over two hundred people to a meeting held at a resort hotel in the coastal community of Waldport, Oregon. The Two’s open meeting in Waldport convinced approximately twenty individuals to join H.I.M. and seek to overcome their humanity. National headlines followed a month later, when newspapers recounted parents who left their children and homeowners who signed over property deeds in order to follow the Two on what attendees at the Waldport meeting said was a trip to a “higher level.”⁴¹

During this new phase of the group’s history, the Two, who now called themselves Bo (Applewhite) and Peep (Nettles)—as they would for the remainder of the

decade and into the 1980s as well—made a concerted effort to portray themselves as something akin to but different than other religions. Three of the main sources from this time period—a letter that they mailed to prospective candidates in fall 1975, and two extended interviews they granted in early 1976—all indicated an increasing uneasiness of the Two towards the category of religion. Implicitly, they contrasted religion with science, emphasizing the superiority of the latter because of its materialistic and naturalistic foundations. In a partial transcript of their Waldport meeting, Bo and Peep, né Applewhite and Nettles, explicitly contrasted their own process with that of religion. “Now if you think from what is being said that you have come to hear something that is religious or [a] sermon, it is not,” they insisted. “It is the truth that was brought before and during the time between seasons[;] the world made the truth ‘religion.’” Bo and Peep distinguished the truth from religion, arguing that only “between seasons,” (that is, between visits by extraterrestrial-influenced teachers such as themselves) human beings reduced the truth into religions. Bo and Peep insisted that their message fell into the former category, that of truth, rather than religion. Calling their message “just as true as the price tags on your groceries and just as basic,” they insisted that the overcoming process they taught resulted in a “literal, actual, biological and chemical response.” Again, the Two utilized the language of science to position their message, but added to it what must have seemed a banal comparison to grocery store price tags. Both, however, indicated a naturalistic perspective. Human Individual Metamorphosis postulated literal, actual, scientific views. Religion, Bo and Peep implied, did not.⁴²

A letter that Bo and Peep provided to prospective members of H.I.M. demonstrated one of the earliest examples of this anti-religious, or what one might term

an anti-spiritual or anti-supernatural, position. Most likely written after the Waldport meeting, and definitely prior to October 1975, the letter employed somewhat different vocabulary but described the same basic position as the three earlier statements.⁴³ It assumed that the reader already possessed some knowledge of what it called “the process,” and provided specific details to potential adherents, or “prospective candidates,” as it addressed them. Such individuals should provide the Two with a phone number, and next gather together camping gear for the trip, including “a tent, a warm sleeping bag, a stove, at least two changes of winter clothing and two for warmer weather, eating and cooking utensils.” They should also bring a car and whatever money they could, Bo and Peep instructed. The letter stated that the prospective candidate would join a partner to help each other overcome their human attachments, and that other questions would be answered by fellow candidates as they arose. Beyond such minutia, Bo and Peep also used the letter to describe the nature of the process itself, taking care to distinguish it from other types of pursuit. “This is not a spiritual trip,” they wrote. “To reach the Next Kingdom above human, your body must literally be converted over biologically and chemically. This metamorphic process happens automatically as you will yourself to overcome your humanness.” Again in the letter, they reiterated, “[t]his is no spiritual, philosophical, or theoretical path to the top of the mountain. It is a realty; in fact, it is the only way off the top of the mountain. All roads leading to the top were good because they got you there.”⁴⁴ Together, these explanations contrasted the spiritual (and in the latter case, the philosophical and theoretical as well) with the literal, biological, chemical, and real. Using the language of science (again, chemistry and biology), Bo and Peep declared that they taught a literal, real, process, as opposed to a spiritual one.

The Two's insistence of the distinction between their own method and what they regarded as spiritual approaches particularly stands out because so many of their followers came from self-declared spiritual quests and a subculture of spirituality. Based on first-hand interviews and participant-observation, Robert Balch and David Taylor described Bo and Peep's followers as "[n]early all [being] long-time seekers of truth whose previous religious and spiritual trips included yoga, Scientology, Divine Light, astrology, Transcendental Meditation, Edgar Cayce, and many others."⁴⁵ Similarly, James Phelan, who interviewed at least a half dozen current and former members of the group in 1976 for a *New York Times* article, described their "one common denominator" as spiritual seekers. "Many have tried Scientology, yoga, Zen, offbeat cults, hallucinogens, hypnosis, tarot cards and astrology. Almost all believe in psychic phenomenon."⁴⁶ Mirroring the pseudonymous Sheila Larson, the spiritual seeker who in Robert Bellah's *Habits of the Heart* study declared her self-created religion "Sheilaism," one representative follower of Bo and Peep who had joined the group at the Los Angeles New Age group meeting declared, "I used to sort of have my own religion, which was sort of a conglomeration of everything. I was into yoga, meditation and I read different things, I studied metaphysics, I just tried to be, you know, nice in my own way."⁴⁷ All these individuals identified with the idea of spirituality and the spiritual quest. Why then did Bo and Peep insist that their own project was something else?

The Two might have declared their process "not a spiritual trip" in order to differentiate themselves from their fellow competitors in America's spiritual marketplace, though that seems an odd manner in which to appeal to spiritual seekers. Bo and Peep's reasoning became clearer in light of an interview they granted UFO researcher Brad

Steiger on January 7, 1976. Bo and Peep, the interview revealed, considered religion and spiritual pursuits dogmatic and fantastical, prone to irrationalism and illogical claims. In other words, religion was not scientific enough. When Steiger asked the Two what constituted the central message of their mission, the Two responded by stressing the *real* nature of their message. In doing so, they again contrasted their own position to religion: “We say, ... ‘Try to make them aware of the next level of existence so that they’ll know that it actually exists, that Jesus is not a fantasy floating on a cloud someplace. God is not floating on a cloud someplace. It’s as real as what you are right now. It’s *more* real.’”⁴⁸ The published transcript of the interview contains very few words printed in italics, indicating that the Two must have strongly stressed the concept of their message’s reality. Their dismissive tone towards those who took a less physical view of the heavens, who did not believe that Jesus and God possessed physical bodies in the physical heavens of outer space, also revealed their antagonism towards religion, particularly the Christian religion of the majority of Americans. They repeated this dismissive tone elsewhere in the interview. For example, when Steiger asked if the UFOs they postulated were physical vehicles, they explained that the flying saucers are “actual means of transportation that serve as protection and an expedient function of travel. Members of the next level do not flap around on wings, and they are not spirits that can just travel with a swift process of the mind.”⁴⁹ Next level aliens, Bo and Peep insisted, possessed physical bodies and were therefore real, unlike more spiritual conceptualizations that other religions might possess. The Two equated reality and materialism, and implied that the spiritual, which empiricism could not verify, represented falsehood.

When Steiger asked the Two their opinion of the “orthodox churches” and “orthodox churchmen,” Bo and Peep reiterated a point that they had made at the Waldport meeting, namely that religion arose as the invention of human beings during times when the Earth was out of contact with the Next Level. Combining that sentiment with language that mirrored Protestant theological critiques of the rise of early Catholicism, the Presbyterian-raised Applewhite and Baptist-born Nettles declared that religion relied on dogmatism and ritual, rather than truth:

When Jesus brought the truth, he did not bring it as a religion. The *world* made it a religion after he left. The world couldn’t really do any better during that season of darkness after Jesus left than to make his teachings dogmatic religions and to practice rituals that made them feel like they were coming closer to God. But when the season is here to expose the truth, it’s time to get out of those practices and put into realistic action what it takes to get to the next level—in the same way that Jesus demonstrated.⁵⁰

Dogmatism and ritual characterized religion, Bo and Peep declared, as compared to the “truth” brought by the extraterrestrial Jesus (as they understood him) and themselves. Given their equation of religion with such characteristics, the Two’s dismissal of their message as “not spiritual” makes somewhat more sense. It combined their materialistic assumptions with a very Protestant suspicion of ritual and institution.

Nevertheless, Bo and Peep preached a fundamentally religious message, and they fixated on religious concepts. In response to an audience question, they had willingly accepted even during the Waldport meeting that “the Bible is the most significant history book that exists on this planet,” despite the influence of its human compilers on the text.⁵¹ Religion was not a complete “delusion,” the Two admitted, because it described the activities of previous Next Level visitors and generally taught that “this next level is reached only by individuals who have become weaned of Earth-type lusts, and have

become creatures that Earthlings would call completely good.”⁵² Though they hastened to insist that Christ’s transfiguration and resurrection represented “a *natural* process” (again, the stress stands out in the published transcript), Bo and Peep insisted to the UFO investigator Steiger that Christianity had some value. Several times they cited the New Testament in response to apparently non-religious questions, for example their reference to the parable of the vineyard owner when asked if latecomers to their overcoming process could receive the same benefits as earlier converts.⁵³ When asked what abilities next level extraterrestrials possess, Bo and Peep responded that “[j]ust as Jesus had the capacity to change his molecular structure and to walk through walls after his resurrection, one’s capacities become almost limitless.”⁵⁴ Despite their avowal of materialism and naturalism, the Two continued to use religious language and ideas, particularly those drawn from the New Age and Protestant Christian traditions. Nor could Bo and Peep deny that their message originated in their earlier religious quests, their work at the Christian Arts Center and Know Place, and their reading of religious texts.

Technological Dispensationalism

Bo and Peep’s materialistic approach to religion became particularly evident in their treatment of eschatology (ideas about the endtimes) and especially their reading of the Christian text, the Book of Revelation. Specifically, they transformed a particular Christian eschatological understanding known as dispensationalism, and its key component, the rapture, into a materialized or naturalized understanding of eschatology. This reinterpretation of a particular form of apocalyptic thought eventually contributed to

the mass suicides that ended the terrestrial existence of Heaven's Gate, but in the early days of the Two's work together, it served as an hinge for much of their thinking. What I call Bo and Peep's "technological dispensationalism" derived from their materialized reading of a section of Revelation, and their concept of "the demonstration," which referred to a naturalized form of resurrection.

As far back as their first statement and throughout the first several years of the history of the Human Individual Metamorphosis movement, the Two predicated their message on what they dubbed "the demonstration." The Two declared that at some point in the near future, an unknown party would assassinate them. After outsiders verified them as dead, the Two would repair their bodies, metamorphose themselves into extraterrestrials, and depart the earth aboard a UFO, thereby "demonstrating" the truth of their message to their followers and the wider world. The "Human Individual Metamorphosis" statement explained,

There are two individuals here now who have also come from that next kingdom, incarnate[d] as humans, awakened, and will soon demonstrate the same proof of overcoming death. They are "sent" from that kingdom by the "Father" to bear the same truth that was Jesus'. This is like a repeat performance, except this time by two (a man and a woman) to restate the truth Jesus bore, restore its accurate meaning, and again show that any individual who seeks that kingdom will find it through the same process. This "re-statement" or demonstration will happen within months. The two who are the "actors" in this "theatre" are in the meantime doing all they can to relate this truth as accurately as possible so that when their bodies recover from their "dead" state (resurrection) and they leave (UFO's) those left behind will have clearly understood the formula.⁵⁵

Though the subsequent two statements did not explicate the demonstration nearly as much as the first statement, both mentioned it. The second statement alluded to a forthcoming "illustration" and described the Two as "illustrators," and the third invoked the theatrical metaphor of the first statement in describing the event a "death and

resurrection scene” to “demonstrate” the nature of real resurrection.⁵⁶ Other sources provided more details. The “What’s Up?” mailing in July 1975, for example, provided details on the time frame of the resurrection, clarifying that “the ability to heal a diagnosed dead body and walk away some 3-1/2 days later ... is one of the characteristics of a member of that next kingdom.”⁵⁷ Bo and Peep apparently did not stress the demonstration at some of their earliest public meetings—the limited Waldport transcript does not mention it, nor do the first newspaper articles on the movement—but they discussed the demonstration in each of the interviews they granted, to Hayden Hewes in July 1974, Brad Steiger in January 1976, and James Phelan later that same month.⁵⁸ Several of the Two’s earliest followers who also granted interviews mentioned the demonstration.⁵⁹

The demonstration that the Two espoused in fact represented a materialistic recasting of an end-time prophecy from the New Testament’s Book of Revelation, a fact that the Two hinted at with their reference to a three and a half day time period to repair their bodies. When interviewer Brad Steiger asked Bo and Peep if they patterned themselves on “the experience and death of Christ,” whom Christian tradition also records as lying for three days before resurrection, they responded by alluding instead to “the passage in Revelation” that predicted them.⁶⁰ Steiger did not push them on this matter, perhaps because as a secular ufologist he was unfamiliar with Revelation. Phelan, who interviewed Bo and Peep shortly after Steiger, failed to provide a direct quotation, but summarized that the Two “base[d] this prediction on the claim that they [were] not ordinary visitors from outer space but heavenly messengers whose appearance was foretold in the New Testament’s Book of Revelation.”⁶¹ Elsewhere, the Two provided a

specific reference. One man whom Bo and Peep encountered recalled that they told him, “We have a message for you. You are to meditate. Read Revelation 11 and meditate.”⁶²

Similarly, a member of the movement wrote on a postcard to her family in September 1975, “Mama. Am doing beautifully. Truly feel I am on the path I’ve searched for.

Thank God. Please don’t worry. Have faith. I am completely taken care of while I am learning my Father’s will always in all ways. P.S. Read Revelation Chapter 11 in the New Testament.”⁶³

The Revelation passage to which Bo, Peep, and their follower alluded describes two witnesses prophesying during the final days, only to meet popular scorn, assassination, and subsequent resurrection. The King James version of the New Testament (the translation most frequently cited by Bo and Peep, a fact that itself indicated the tradition Protestant Christian backgrounds of the two religious innovators) declares:

[An angel said:] And I will give power unto my two witnesses, and they shall prophesy ... And when they shall have finished their testimony, the beast that ascendeth out of the bottomless pit shall make war against them, and shall overcome them, and kill them. And their dead bodies shall lie in the street of the great city. ... And after three days and an half the spirit of life from God entered into them, and they stood upon their feet; ... And they ascended up to heaven in a cloud. (Revelation 11:3-12)

The Two identified themselves as these two witnesses, implicitly at first, and eventually explicitly.⁶⁴ Like their treatment of resurrection more broadly, which Bo and Peep declared a chemical and biological process akin to the metamorphosis of a caterpillar, the two insisted that the special case of the resurrection of the two witnesses represented a demonstration of the metamorphic possibilities of the human body. Recasting the Revelation prophecy in material terms, they insisted that the Bible’s description of

resurrection and the ascension to heaven “in a cloud” represented a coded or symbolic description of a totally material process. “This demonstration is to clarify what Christ’s mission was 2,000 years ago. Man could not understand then, but can *now* at this time,” Bo handwrote onto one of the Two’s mailings.⁶⁵ The Two’s reliance on the book of Revelation provides a crucial hint to unpack the Two’s wider message. Specifically Bo and Peep recast a variety of Christian millennialism called dispensationalism into materialistic language.

Emerging in the nineteenth century, dispensationalism had swept through American evangelicalism and remains popular today among many conservative Christians.⁶⁶ Dispensationalists rejected the (postmillennial) ideal of human progress so prevalent in nineteenth-century American and European culture, and rather assumed a relatively constant decline of human civilization. Historian George Marsden explains the dispensationalist position, “Christ’s kingdom, far from being realized in this age or in the natural development of humanity, lay wholly in the future, was totally supernatural in origin, and discontinuous with the history of this era.”⁶⁷ Scholars also sometimes refer to dispensationalism as a type of premillennialism, since the prophesied one thousand years of peace (millennium) follows Christ’s return rather than humanity’s works. For dispensationalists, when the end comes, it will be sudden, in accordance with a strict reading of the book of Revelation, and utterly unstoppable. Ironically, Bo and Peep took a systemization known for its supernaturalism and morphed it into a naturalistic interpretation of scripture.

Dispensationalists cull Biblical books—particularly the books of Daniel and Revelation—for a millennial timetable, encapsulating the history of the world into

distinct epochs, also called dispensations. The most common dispensational approach is that of C.I. Scofield (1843-1921), whom Marsden calls “the great systematizer of the movement.”⁶⁸ Scofield identified seven dispensations, those of innocence (Eden), conscience (antediluvian), human government (postdiluvian), promise (Old Testament patriarchs), law (Mosaic), grace (the current age of the Church), and kingdom (the future dispensation of Christ’s heaven-on-earth). For Scofield and other dispensationalists, a “rapture of the true church,” during which faithful Christians physically rise into midair, rendezvous with Christ, and enter the heavens, inaugurates the seventh dispensation.⁶⁹ Those left behind by the rapture face the tribulations and traumas described in the book of Revelation. Although Bo and Peep only seldom used the term ‘dispensation’ and never ‘dispensationalism,’ they nevertheless reinterpreted Scofield’s dispensational system in accordance with their naturalized theology.⁷⁰ They employed two central dispensationalist themes: the seven earthly epochs, and the rapture. In both cases, they translated the conventional dispensationalist approaches into their own materialistic and UFO-centered vocabulary.

The Two’s most clear codification of their dispensational system occurred in a statement that they prepared for Hayden Hewes and Brad Steiger’s book, *UFO Missionaries Extraordinary*, a portion of which the book’s publisher printed in the final text as “A Statement Prepared by The Two.” Like other dispensationalists, the Two divided world history into seven eras, five of them in the past, one current, and one in the future. Similar to the approach of their earlier statement, “Clarification: Human Kingdom – Visible and Invisible,” in the published statement Bo and Peep prepared for Hewes and Steiger they explained the eras as “different ‘grades’ in the human ‘school’”

during which human receive different types of “special help from the level-above-human.”⁷¹ The Two specified the five historical epochs as those of the biblical Adam, Enoch, Moses, Elijah, and Jesus, three of which (Adam/innocence/Edenic, Enoch/conscience/antediluvian, Moses/law/Mosaic) matched the popular Scofield system of dispensationalism. Paralleling mainstream dispensationalism’s understanding of the current dispensation, that of grace or Church, the Two declared that “[t]he sixth major help period for Earth’s human garden is *now*. ... Once again we are in a brief season when the ‘light’ or ‘knowledge’ or ‘energy focus’ is on this planet.”⁷² Finally, in a dispensationalist coup-de-grâce, they explained:

The seventh closeness, which is immediately upon us in the sense that those who are in the middle of their normal life span will easily live to see its completion, will include such events as what the Christian church refers to as the second coming, the “rapture,” and the completion of the final prophecies in John’s Book of Revelation.⁷³

For the Two, like other dispensationalists, the rapture represented the inauguration of the seventh era of human history.

Unlike most Christians following the Scofield dispensational system, who understand each era as defined by how God related to human beings through prophets or the Spirit, Bo and Peep interpreted the dispensations in a thoroughly naturalized or materialistic manner. Inaugurating each of these phases, they explained, the Next Level or level-above-human emitted a powerful burst of energy that washed over the Earth. While “you might not be able to see the actual physical manifestation of energy,” Bo and Peep admitted, it nevertheless existed, and shined on the planet like a shaft of light.⁷⁴ When this extraterrestrial energy touched the Earth, it created an “energy field” conducive to human development. Employing another materialistic metaphor, the Two

explained that “[t]hat energy source might be more clearly understood if you picture a searchlight that is circling the far distant heavens without interference from other bodies in the heavens, clearly shining on this planet as it did approximately two thousand years ago in its last orbiting.”⁷⁵ Like a physical spotlight, planets and other astronomical objects might obstruct the next level energy, resulting in only periodic eras during which the light reached the Earth.⁷⁶

Much of Christian dispensationalist thought focuses on the idea of the rapture of the faithful, the event during which dispensationalists believe living Christians rise into the air, meet Christ, and ascend into heaven. Hal Lindsay’s *Late Great Planet Earth*, a dispensationalist bestseller popular when Bo and Peep first formulated their ideas, climaxed with a description of the rapture, as well as incorporated the concept into much of the overall work.⁷⁷ (It is even quite likely that Bo and Peep read Lindsay’s book, one of the decade’s best sellers, given their description of reading a variety of religious, spiritual, and scientific literatures, however there is no direct evidence of influence.⁷⁸) Bo and Peep accepted the idea of the rapture, but transformed the traditional view into a technological and material event. Rather than meeting Christ midair, their followers would aeriaily rendezvous with UFOs, one of which would hold the extraterrestrial whom human Christians remember as Jesus of Nazareth. “The one who was Jesus will come in at close range (as soon as those who have chosen to change over do it) and receive the elect in his company,” they explained in their published statement.⁷⁹ The UFOs, now bearing the human beings who had overcame their humanity through Bo and Peep’s process, would ascend into the literal heavens, forever leaving behind the Earth. In using the specifically religious term, “the elect,” Bo and Peep revealed the underlying

religious content of their message, which used the vocabulary of material and natural objects—UFOs, biology, and space—but the concepts of religion—resurrection, prophecy, and rapture.

That the UFO rendezvous represented a technological reimagining of the rapture explains why the Two so adamantly insisted that the UFOs would not land, but would meet the successful candidates for the Next Level in midair. During the Waldport meeting, Bo and Peep stressed that although Jesus awaited successful candidates for the next level in a UFO, “He will not come down to this environment and show you His bruises and His glowing white robe. But he is present at close range, even now.”⁸⁰ Attendees of the meeting might have interpreted that remark as an indication that the only evidence that Bo and Peep promised was their demonstration and not the presence of Christ, and the Two certainly did stress that point as well. Yet their response to one of Brad Steiger’s question clarified the importance the Two placed on the aerial rendezvous itself, that is the technological enactment of the rapture. “Will other people be able to see the spaceship land and see the followers get on board?” asked Steiger. The Two responded, “[t]he spacecraft will not land. Individuals will be lifted up to the spacecraft if they have overcome. That is why if you go on this trip you have to overcome everything. If you have not overcome, you will not be lifted up.”⁸¹ Other sources repeated this important claim that the UFO would not land, and that the elect would rise into the air to meet Christ and craft midair.⁸² The best explanation for the Two defense of this proposition is their desire to portray the impending departure of their followers on the UFO as a materialistic form of the rapture.

Religion, Science, and Faith

German Physicist Max Planck, one of the founders of quantum physics, wrote that “over the entrance to the gates of the temple of science are written the words: Ye must have faith.”⁸³ Fittingly, Bo and Peep insisted that their materialistic religion also required faith. Though they absorbed the scientific approaches of naturalism and empiricism into their religious system, the Two could not separate themselves from the idea of faith. In particular, they stressed that potential followers and candidates for their technological rapture must have complete faith in the demonstration and the process of overcoming humanity through biological metamorphosis. Bo and Peep’s embracing of this position developed over several years and coincided with another important change within the group, a transition from a highly individualistic approach to a more hierarchal one stressing the religious authority of the Two. Both shifts indicate the complex nature of the Two’s movement, which despite claiming the tools and rhetoric of science, upheld a fundamentally religious message of personal faith, transformation, rapture, and salvation. It also reveals a transition within the movement from a position more in keeping with that of science, namely that the overcoming process required an individual’s accurate reproduction of experimental methods, to one more in keeping with what Americans consider religious, i.e. necessitating both faith and the guidance of a religious leader.

The Two’s earliest written sources minimized both the value of faith and that of relying on outside support. In addition to frequent mentions of the biological and chemical nature of the process of bodily transformation, the first statement, “Human Individual Metamorphosis,” explicitly called Bo and Peep’s message “the formula,” phrasing that implied an almost automatic nature to the overcoming process. While their

statement did recognize the need for belief, it stressed achievement over motivation or intention. “Those who can believe this process and *do* it will be ‘lifted up’ and ‘saved’ from death—literally,” they promised, stressing that the process required action or *doing*.⁸⁴ Their third statement, “The Only Significant Resurrection,” made similar claims as to both the importance of action and the automatic nature of the process for those who completed it. “Each individual who can endure to the end of his lessons will come into his indestructible body just as the caterpillar comes into the body of a butterfly.” Like the chrysalis, the Two’s process required effort towards material transformation, not faith.⁸⁵ Caterpillars became butterflies whether they believed they would or not, just as (theoretically) materialistic scientists could achieve an experimental effect whether or not they had faith in whatever results the procedure promised to produce.

Bo and Peep’s statements also insisted that their process required individual effort only and not the active guidance of other human beings. The Two’s third statement declared that the “chemical conversion” integral to the overcoming process was a “‘selfish’ time-span” during which a human being concentrated solely on overcoming the human condition and beginning their metamorphic process. Therefore potential students must prepared themselves to both reject companionship with others and be rejected by those around them.⁸⁶ Bo and Peep’s followers understood this explicitly. One reported, “[t]his isn’t a group metamorphosis and the organization isn’t going to heaven.”⁸⁷ Further, even the Two were not necessary. In their interview with Brad Steiger, Bo and Peep explained that if anyone “truly seeks to enter the kingdom of Heaven, the option is his and he will do it if he chooses to. Such people do not do it through us. They do it through the information we are sharing.”⁸⁸ Even the name of the group, Human

Individual Metamorphosis demonstrated this highly individualistic approach. Achieving the transformation into an extraterrestrial and journeying with Bo and Peep into the heavens required neither faith nor guidance, the Two insisted.

However, shortly after the Two composed their three statements, several current and former members of the group stressed the value of belief or faith within the process. One former member of the movement, a twenty-year old spiritual seeker who left H.I.M. in September 1975 after several months in the group, provided a summary of the Two's teachings to George Williamson, a *San Francisco Chronicle* reporter. Williamson summarized that the young apostate as saying that "[t]he center of HIM theology asserts that converts must develop 100 per cent faith in capacities to The Two's capacities to die and then resurrect. After the promised event, full believers supposedly will then be rewarded with a UFO dispatched to carry them to a higher plane of existence." The allusion to both the demonstration and the rapture match the Two's own statements, but the concept of "one hundred per cent faith" had not appeared in any of the previously published or disseminated materials produced by the group or its members.⁸⁹ Nor did the other published accounts and interviews with current or former members of the group published around the same time mention this need for faith.⁹⁰

Yet this apostate was not alone in his understanding of the value of faith. Several months earlier in July 1975, another young member named Peggy wrote a letter to her parents that repeated the same position of the necessity of belief. Peggy's short letter covered the basics of the movement, with the first paragraph explaining that she sought entrance into the "next evolutionary kingdom—which has been called the Kingdom of Heaven," and the second paragraph describing both the process and the demonstration.

She provided few details, but offered nothing different than the Two's own positions in their work. The young woman's third paragraph turned to the notion of how one enacted the process, and whether her parents, who had never met Bo and Peep, might follow in the footsteps of their daughter: "You may be interested in doing this yourself—either now or at the end of the next age. (2000 years.) The only thing necessary to do it is simply to believe it possible and natural, want to do it, and get in touch with your heavenly father—i.e. the one who is already a member of the next kingdom and will guide you (though invisible) through the process. And that's it." Peggy's summary of H.I.M.'s teachings matched that of the group's leaders, and therefore her assessment of the nature of the process would also seem accurate. To succeed in the process, Peggy explained, one must "believe it possible and natural," want it, and gain the aid of an invisible next level guide.⁹¹ Bo and Peep's naturalized materialistic religion also seemed to require belief, or faith, as well as the support of a guide.

It is interesting that only the member rather than the leaders of H.I.M. discussed the notion of faith with the media, though certainly many other members did not mention the concept of faith in their interviews. Such discrepancies might owe to differences in how adherents understood the message that the Two preached, but it probably also indicates that Bo and Peep vacillated on this issue during the summer and autumn of 1975, since their followers understood the topic of faith differently during this time. H.I.M.'s leaders would eventually reach a consensus, first shared with interviewer James Phelan in early 1976, and that consensus continued into the group's later history. The Two stressed to Phelan that potential passengers on the UFO, or those who wished to take part in their technological rapture, must possess faith. Phelan summarized that the Two

insisted on “unquestioning faith,” and that “[t]o qualify for the voyage, they say, one must believe in them without ‘any of those little tricks,’ as they refer to miracles.”

Regarding the demonstration, the interviewer noted, “they point out [that it] will be staged not to convince their followers but to confound the scoffers.”⁹² Though the Two appeared to settle this issue in their conversation with Phelan, they would periodically return to the question of faith, which would haunt the movement even in its final days.

Shortly after Bo and Peep’s interview with James Phelan, the Two also enacted another shift in their movement’s worldview, namely the transition from an extremely individualistic approach to the overcoming process to one that insisted on the value of guides and teachers. This shift also marked a transition away from purely individualistic empiricism reminiscent of science towards the more authoritative model of knowledge associated with religion. The young follower Peggy’s description of invisible aids to the individual’s process of human metamorphosis hinted at the basis of that transformation, the Two’s long-standing acceptance of the idea of spiritual guides. Even before she met Applewhite, Nettles claimed to have a spiritual guide, a deceased monk named Brother Francis, who spoke to her from the spirit world and helped her prepare astrological charts.⁹³ The positive view of spirit guides carried over into H.I.M., which despite minimizing the value of human help, extolled the significance of next level guides. The second statement, “Clarification: Human Kingdom – Visible and Invisible” focused on the issue of spirit guides, warning that many would lead astray potential followers of the overcoming process, but that some, those of the next level or the “Heavenly Father” could direct a person by providing tests and opportunities to overcome their humanity.⁹⁴ Similarly, the Two wrote in their letter to prospective candidates that “[i]f you recognize

this as Truth; [sic] you have only to ask with all your might (out loud or in your head) for your Father(s) in the Next Kingdom to give you whatever tests are necessary for your overcoming.”⁹⁵ That is, next level aids could assist Bo and Peep’s followers through offering tests to encourage them to overcome their humanity. While at first the Two minimized the potential value of any other helpers beyond these invisible spirit guides, during the later 1970s, they taught that H.I.M.’s adherents, and therefore anyone who wished to accompany them on their technological rapture, needed to assistance of the Two themselves.

Unfortunately no documents survive from this time period, but Robert Balch, who studied the group ethnographically during the 1970s and later interviewed former members, offered both evidence of the transition as well as an explanation for it. Balch noted that “when disputes arose, each individual could justify his or her opinion by claiming to have received guidance directly from a member of the next kingdom,” leading to conflicts within the group as well as between the leaders and their followers.⁹⁶ Such antinomianism endangered the group’s stability, and its leaders stepped in to prevent complete chaos. “The Two solved the problem by eliminating any possibility of individual revelation,” wrote Balch. “They explained that all information from the next level was channeled through a ‘chain of mind’” that linked the next kingdom to individual members through Bo and Peep. The Two, he summarized, “became necessary intermediaries between members and the next level.”⁹⁷ Balch reports that following this new revelation, commitment levels increased and defection rates dropped.⁹⁸

These two transitions, from rejecting the idea of faith to embracing it, and from emphasizing extreme individualism to the value of the movement’s two leaders,

demonstrate an important transition in the early days of the group that would become Heaven's Gate. Though the movement's materialism and naturalism carried through into the 1980s and 1990s, Bo and Peep's early emphasis on a purely individualistic and empirical approach to religion could not sustain a religious group. This approach, reminiscent of a lone scientist studying the world in search of truth, requiring their followers to rely solely on their own senses, intuition, and whatever contact they felt with invisible next level guides. However, it permitted if not encouraged antinomianism and discouraged the ability to maintain a community. Individualistic empiricism proved too costly the movement, and Bo and Peep curtailed it. Further, since the demonstration did not occur—the “delay of the parousia” problem that first century Christians also faced—the Two could not rely upon an empirically verifiable illustration of the truth of their religious message. Belief, faith, and the requirement of heeding the words of religious leaders replaced the pure materialistic individualistic naturalism of H.I.M.'s early days.

“A Focusing”: Religion, Science, and Prayer

Despite the introduction of concepts of faith and religious leadership, Human Individual Metamorphosis did not leave behind the naturalistic approach to religion that characterized the group. The movement would disappear from popular notice between 1976 and 1988, and unfortunately very few primary sources exist from this time period.⁹⁹ One of the few, a short booklet titled “Preparing for Service,” survived through the efforts of a former member of the group. Describing it both as “written by [Bo and Peep]” but also a “little booklet some class members compiled from things [Bo and Peep]

had said or written,” the text offers a glimpse of how the Two’s followers, who by then referred to themselves as a “class” interpreted and recorded the message of their teachers.¹⁰⁰ Most of the text contains a series of aphorisms, ranging from the banal (e.g. “Forget your fears. Realize that your condition is of your own making. There is no power that can keep you down but yourself.”) to restatements of the fundamental positions of the movement (“Help me have no human ways. No thoughts of self, No [sic] faults to see. Only the ways of space.”).¹⁰¹ The majority of the aphorisms conveyed the message that the reader could control their body, subjugate it to their mind, and cleave to a Next Level consciousness. Given Bo and Peep’s earlier material, the statements in “Preparing for Service” demonstrated a continuity of thought. Salvation or resurrection, the members of the movement continued to believe in 1985, meant a physical metamorphosis of the body through a process of rejecting human influences and seeking to follow the guidance of extraterrestrial teachers. The process remained entirely materialistic and natural.

The booklet ended with a long prayer or meditation exercise titled “A Focusing” that, to use its own words, encouraged a reader to focus inward on the process of bodily transformation. The prayer provides a rare glimpse of how the members of the movement that became Heaven’s Gate (it is unclear what name the group used at the time they produced the booklet)¹⁰² put into practice their approach of absorbing science into religion. Though clearly a prayer or meditation, it mixed language of science and religion, fixating on the development of something akin to a “Next Level gland” that the reader of the prayer hoped to develop. The Focusing meditation reveals how the

adherents of Heaven's Gate applied their materialistic understanding personal metamorphosis to the traditionally religious notion of prayer.

Composed of twenty-five short verses, the booklet indicated pauses before many of them, and showed several marked off by parentheses, which might have indicated instructions to read those verses silently. This created a set of natural divisions within the meditation: a four verse opening, a central section of ten verses preceded by what the instructions referred to as "especially long pauses," four transitional verses marked off by parentheses, and a six verse conclusion. Taken as a whole, the meditation developed a theme of personal transformation through bodily control and material metamorphosis, using language drawn from both scientific and religious repertoires.

The reflection began with a short section that combined the rhetoric of the spiritual seeker with that of science and religion: "I would like to know more than I now know. // I would like to have more control over my vehicle—it's [sic] chemistry—its thoughts—its responses—its desires—than I now have. // I would like to rise above the things that distract me and bind me to this world." The prayer's opening line situated the meditation as one centered on knowledge, using words with which most people would no doubt concur, namely the desire "to know more than I now know."¹⁰³ This mantra, one that a scholar or scientist might also take to heart, set the tone for the remainder of the prayer. Members of Heaven's Gate did not worship beings of the Next Level, nor did they ask their invisible guides for succor or support. They did not thank their Creator for giving them a body or mind or soul, nor make any particular requests. Instead they stated their desire for knowledge. The second verse shifted the prayer towards what would become its theme, the aspiration to master the body, particularly its chemistry, thoughts,

responses, and desires. Though members of many other world religions, particularly mendicants and monastics, seek the mastery of the body, the members of Heaven's Gate almost uniquely stated their desire to control not only the whirlwind of the mind, but the chemical makeup of their bodies.¹⁰⁴ In keeping with the early statements of the movement's leaders, the members of Heaven's Gate continued to seek a bodily metamorphosis.

The nucleus of the prayer focused on a physical "spot" on the body, what the meditation compared to a gland, drawing the attention of the reader to the spot and emphasizing its value in the process of bodily transformation. "There is a spot in the middle of my head. // I am now concentrating-focusing on that spot. (It is about the size of my eyeball, it is like a gland that has been asleep, inactive, waiting for me to concentrate on it.) // I am, right now, going to feel it become active and alive. // I am focusing on it, I can feel it now in its location. // All of my energy is being directed toward this Next Level gland. // As this spot accepts all of my energy it is helping my chemistry change. // I can feel the power of that energy there. // I can feel the calm of that power. // I can feel my chemistry in control. // I feel no frustration or anxiety. // I feel only that calm, powerful energy."¹⁰⁵ That the center of the "Focusing" prayer treated a gland and the control of bodily chemistry reveals the continued place of the materialistic understanding of transformation within Heaven's Gate, or the absorption of scientific concepts into its religion. The "spot in the middle of the head" or gland might also have alluded to the Hindu concept of the seventh *chakra*, the energy center positioned either between the eyes or on the crown of head from which some Hindus believe a *yogi* can project their consciousness, as we saw in the case of Gaudiya Vaishnavism and the

International Society for Krishna Consciousness. During the 1970s and 1980s the Hindu concept of chakras had become very popular in the New Age movement, and it is quite possible that the Focusing prayer alluded to a belief in the chakra, though the only explicit mention of the chakra concept among Heaven's Gate material is a dismissal of the value of the system in a member's written statement in 1997.¹⁰⁶

Whether or not the cranial gland represented a reference to a chakra, the central portion of the "Focusing" prayer clearly considered the presence of this spot highly valuable and important in the overcoming and transformative process. The spot itself represented a "Next Level gland" and therefore a tangible and material representation of the physical heavens to which members of Heaven's Gate wished to journey. By activating the gland—medical language that itself reveals the naturalistic assumptions of the group—the reader of the prayer hoped to become calm and remove frustration and anxiety, all of which represented a step in overcoming. Even more importantly, energizing the gland led to the physical metamorphosis itself, or as the prayer declares, "helping [the] chemistry change."

The prayer continued with four verses marked off by parenthesis. Unfortunately the booklet did not indicate the meaning of this typographical offsetting. Possibly readers of the prayer spoke these verses silently, or perhaps the parentheses marked them as entirely optional. Regardless, they continued the same theme of the earlier section, reiterating the value of the spot in the overcoming process and therefore what the prayer's reader hoped to be a bodily metamorphosis: "(As this spot becomes more alive it will help me sustain this calm.) // (It will eliminate distraction from my goal.) // (It will keep

me clear.) // (I will know more.)” The prayer concluded with a spoken declaration of intent and entreaty for the physical process of metamorphosis to continue:

As I recognize higher control and knowledge I will adopt it quickly, discarding
my weaknesses.
My potential for growth is limitless.
I am rapidly changing.
Growth has been offered to me and I am choosing to become it.
I feel and hear that spot coming more to life!
Change! Vehicle, Change! Chemistry.
I am going to hold onto this until I sit and become even more!¹⁰⁷

Repeating the themes with which the prayer began, it concluded with a call for transformation and mastery of the body, or “vehicle,” as the movement had come to call the physical form. The prayer’s conclusion brought into focus the materialistic and naturalistic approach of the group that eventually became known as Heaven’s Gate. Human beings possessed a “weakness” that one could overcome through control and knowledge. Successful command over the physical body and its needs resulted in both growth and rapid change, the metamorphosis that earlier sources proclaimed and that gave the group its name, Human Individual Metamorphosis.

The final two verses also reveal a movement at the point of transition. Twelve years after the members of Heaven’s Gate wrote the Focusing prayer, they would commit mass suicide, leaving behind the bodies that they had labored for so long to transform. They hoped through that act to propel their spirit forms into the heavens, where they would assume next level bodies prepared for them. During that decade-long period, Heaven’s Gate shifted from a purely materialistic understanding of the metamorphosis to a more symbolic one, while simultaneously extending the group’s materialism in new directions. The body became merely a “vehicle,” a shell that conveyed the spirit or soul from one incarnation to another, rather than a caterpillar awaiting its transition into a new

perfected state, and the “metamorphosis” of 1975 became a “shedding of the vehicle” of 1997. The penultimate verse of the “A Focusing” meditation, composed approximately halfway between the movement’s beginning and its end, encapsulated both the earlier and later positions regarding transformation and salvation. Calling the body a “vehicle,” it hinted at the easiness with which the members of the group would later shed their bodies, like a person upgrading from one automobile to another. Yet in the same verse, the readers of the prayer invoked a hoped-for change in chemistry, a reference to the group’s original view of material metamorphosis. When Heaven’s Gate again appeared in the national limelight in 1988, the group itself had transformed.

I have cited numerous sources in this chapter and the next that are included in the Heaven's Gate anthology: Heaven's Gate, *How and When "Heaven's Gate" (the Door to the Physical Kingdom Level above Human) May Be Entered* (Mill Springs, N.C.: Wild Flower Press, 1997). I have abbreviated this source as "HGA" in subsequent notes.

¹ "Boisean Remembers Knowing Bonnie Lu, 'UFO Recruiter'," *Idaho Statesman*, Nov 2 1975, 12D. For more on Nettles' Christian upbringing, see Robert W. Balch and David Taylor, "Salvation in a UFO," *Psychology Today* 10, no. 5 (1976): 66, James S. Phelan, "Looking For: The Next World," *New York Times*, February 29. 1976 1976, 62.

Unfortunately, Nettles never revealed the specific Baptist denomination to which she belonged, nor does the secondary literature indicate such specifics. However, she was most likely a Southern Baptist, statistically speaking. A 1971 study showed that 37.5 percent of all Christians living in Texas declared a religious affiliation as Southern Baptists. No other Baptist group accounted for more than 0.1 percent of Texas Christians. Douglas W. Johnson, Paul R. Picard, and Bernard Quinn, *Churches and Church Membership in the United States: An Enumeration by Region, State, and County* (Washington, D.C.: Glenmary Research Center, 1974), 11. The same study found that in the eight county Houston region where Nettles grew up and resided (Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery, and Waller counties) the second largest Baptist group, the Baptist Missionary Alliance, represented only 2.3 percent the size of the largest denomination, the Southern Baptist Convention. Johnson, Picard, and Quinn, *Churches and Church Membership in the United States: An Enumeration by Region, State, and County*, 193-204.

² For more on Nettles' involvement in the Theosophical Society in America, see Catherine Lowman Wessinger, *How the Millennium Comes Violently: From Jonestown to Heaven's Gate* (New York: Seven Bridges Press, 2000), 232, n. 55.

³ Robert W. Balch, "Bo and Peep: A Case Study of the Origins of Messianic Leadership," in *Millennialism and Charisma*, ed. Roy Wallis (Belfast: The Queen's University, 1982), 34. Biographical information on Nettles is scant. These details come from the secondary literature, especially that of Robert Balch. See Balch, "Bo and Peep," 28.

⁴ For Lewis' position, see James R. Lewis and J. Gordon Melton, eds., *Perspectives on the New Age* (Albany: State University of New York, 1992), 6-9. For Melton, see J. Gordon Melton, Jerome Clark, and Aidan A. Kelly, *New Age Encyclopedia: A Guide to the Beliefs, Concepts, Terms, People, and Organizations That Make up the New Global Movement toward Spiritual Development, Health and Healing, Higher Consciousness, and Related Subjects* (Detroit: Gale Research, 1990). The New Age takes a very different form in Europe. Two excellent studies of the movement in the European and British context as Wouter J. Hanegraaff, *New Age Religion and Western Culture: Esotericism in the Mirror of Secular Thought* (Leiden: E.J. Brill, 1996), Michael York, *The Emerging Network: A Sociology of the New Age and Neo-Pagan Movements* (Lanham, Md.: Rowman & Littlefield, 1995).

⁵ Sarah M. Pike, *New Age and Neopagan Religions in America* (New York: Columbia University Press, 2004), 22.

⁶ Eileen Barker, *New Religious Movements: A Practical Introduction* (London: Her Majesty's Stationery Office, 1989), 189.

⁷ Lewis and Melton, eds., *Perspectives on the New Age*, 7. Note that Lewis garners his list of characteristics from a wider set of traits of new religious movements as presented by Robert S. Ellwood and Harry B. Partin, *Religious and Spiritual Groups in Modern America* (Englewood Cliffs, N.J.: Prentice-Hall, 1988), 14-16.

⁸ Heaven's Gate did not share all of the traits that Lewis noted. The movement completely lacked a monistic or impersonal ontology, and although its leaders and members professed belief in psychic powers, they considered them theologically suspect.

⁹ At the time, Virginia's Union Theological Seminary (not to be confused with New York City's seminary of the same name) affiliated with the Presbyterian Church of the United States (PCUS), the southern branch of American Presbyterian. In 1983, the PCUS merged with the United Presbyterian Church of the United States of America (UPCUSA) to form the Presbyterian Church of the United States of America (PCUSA), the largest national Presbyterian denomination.

¹⁰ Robert W. Balch, comments to author, 2 February 2004.

¹¹ This biographical sketch is based on secondary materials, especially Balch, "Bo and Peep," 29. See also the sidebar "Bo and Peep" in Balch and Taylor, "Salvation in a UFO," 66. Readers interested in a more lengthy description and analysis of Nettles' and Applewhite's history should also see Robert W. Balch, "Waiting for the Ships: Disillusionment and the Revitalization of Faith in Bo and Peep's UFO Cult," in *The Gods Have Landed: New Religions from Other Worlds*, ed. James R. Lewis (Albany: State University of New York Press, 1995), 141-42, Phelan, "Looking For: The Next World."

¹² Applewhite's reasons for being in the hospital are unclear; he may have been either a visitor or patient at the time. Balch, for example, calls the encounter "chance," noting that Applewhite was visiting a friend recovering from an operation. <Balch Bo and Peep @33; Balch Waiting for the Ships @143> After the mass suicides, several media outlets claimed that Applewhite had been a mental patient at the time. See Evan Thomas, "Web of Death," *Newsweek*, 7 April 1997, 31.

¹³ Perhaps the most obvious example of such a reductionist reading of Heaven's Gate is David Daniel, "The Beginning of the Journey," *Newsweek*, 13 April 1997, 36-37.

¹⁴ "Bo and Peep Interview with Brad Steiger, 7 January 1976," in *UFO Missionaries Extraordinary*, ed. Hayden Hewes and Brad Steiger (New York: Pocket Books, 1976), 82-3.

¹⁵ Balch, "Bo and Peep," 35.

¹⁶ See Ibid., 36-37. (Some early sources indicate that Applewhite ran the Know Place and Nettles the Christian Arts Center, implying that they existed in parallel, but other sources show that they two ran both operations in serial. Victoria Hodgetts, "UFO Cult Mystery Turns Evil," *Village Voice*, Dec 1 1975, 12, Lynn Simross, "Invitation to an Unearthly Kingdom," *Los Angeles Times*, Oct 31 1975, 4.)

¹⁷ Balch, "Bo and Peep," 39.

¹⁸ "Bo and Peep Interview with Brad Steiger, 7 January 1976," 84. See also Heaven's Gate, "'88 Update," in HGA.

¹⁹ Ellipses in the original. Betty Penson, "During the Summer of 1974 UFO Couple Visited Boise Men," *The Idaho Statesman*, Oct 26 1975, 1-2. Applewhite and Nettles may certainly have reached their religious conclusions earlier. They told a reporter from the *New York Times* that they made "their first public announcement" to an Episcopal Church in Spokane, Washington, and subsequently to a Baptist preacher in Oklahoma. However, they provided no dates for those events. Phelan, "Looking For: The Next World," 63.

²⁰ Applewhite and Nettles used a plethora of names during the first years of their evangelism. During the early days of the movement when they were experimenting with their religious identities, Nettles and Applewhite adopted the monikers Guinea and Pig. "They explained that they were being used as guinea pigs in an experiment of cosmic proportions," writes Balch in Ibid., 53. Later when the two became religious leaders and began gathering a flock, they claimed the names Bo (Nettles) and Peep (Applewhite). The '88 *Update*, authored by Do, explains that the two took the names because "it looks like we're gathering our lost sheep." Heaven's Gate, "'88 Update," in HGA, 7. Finally, the Two renamed themselves Ti and Do, the names of two musical notes. They never explained the reason for their final choice of names, though their use of the two highest notes on the standard Western musical scale (do, re, mi, fa, so, la, ti, do) might have represented their attempt to reach towards the "next level." That 'Do' wraps around to the base of the scale could also have symbolically represented his continued presence on Earth while Ti had ascended to the heavens. I am grateful to musician and scholar Emily Mace for this suggestion.

²¹ The Heaven's Gate anthology text describes the first statement as mailed in March 1975, but composed earlier. However in an interview given in 1976, the Two stated that they wrote the statements in "spring of 1975." "Bo and Peep Interview with Brad Steiger, 7 January 1976," 87, Heaven's Gate, "'88 Update," in HGA, 6.

²² Human Individual Metamorphosis, "Statement #1: Human Individual Metamorphosis," 1975) American Religions Collection, ARC Mss 1, Department of Special Collections, University Libraries, University of California, Santa Barbara. The First Statement is also reprinted in the Heaven's Gate anthology. Heaven's Gate, "First Statement of Ti and Do," in HGA, sec. 2, 3-4 (Originally Produced 1975).

²³ Human Individual Metamorphosis, “Statement #1: Human Individual Metamorphosis.”

²⁴ Around the same time that Nettles and Applewhite began their work together, Trina Paulus’s *Hope For the Flowers* (published 1972) had become popular among countercultural circles. The book described two caterpillars on what might be called a spiritual quest. I am grateful for my colleague at Temple University, Dr. Lucy Bregman, for directing me to that book.

²⁵ Ibid.

²⁶ Very few studies consider religious themes across the New Age, hence there are no secondary sources that consider the place of the concept of “vibrations” in various New Age movements. For a specific example, consider Michael F. Brown’s *The Channeling Zone*, which describes channeling participants using the term to describe states of being as well as a general word to mean a characteristic quality (e.g. “bad vibrations,” “peaceful vibrations,” etc.). Michael F. Brown, *The Channeling Zone: American Spirituality in an Anxious Age* (Cambridge: Harvard University Press, 1997).

²⁷ Human Individual Metamorphosis, “Statement #1: Human Individual Metamorphosis.”

²⁸ See “Bo and Peep Interview with Brad Steiger, 7 January 1976,” 81-83.

²⁹ Emphasis in the original. Human Individual Metamorphosis, “Statement #1: Human Individual Metamorphosis.”

³⁰ Ibid.

³¹ I say that the authors apparently referenced the Transfiguration because of the context of this quote: it appears after their description of the resurrection but before their declaration that Christ returned to heaven in a UFO. The gospels however describe the Transfiguration as occurring before the resurrection, and given Applewhite’s otherwise theological sophistication, I am unsure whether the Two meant the term in its theological sense.

³² “Bo and Peep Interview with Brad Steiger, 7 January 1976,” 137.

³³ Human Individual Metamorphosis, “Statement #2: Clarification: Human Kingdom - Visible and Invisible,” 1975) American Religions Collection, ARC Mss 1, Department of Special Collections, University Libraries, University of California, Santa Barbara.

³⁴ Ibid.

³⁵ Human Individual Metamorphosis, “Statement #3: The Only Significant Resurrection,” 1975) American Religions Collection, ARC Mss 1, Department of Special Collections, University Libraries, University of California, Santa Barbara., 1.

³⁶ Ibid.

³⁷ Ibid.

³⁸ Human Individual Metamorphosis, "What's Up?," 1975) American Religions Collection, ARC Mss 1, Department of Special Collections, University Libraries, University of California, Santa Barbara.

³⁹ Robert W. Balch, "The Evolution of a New Age Cult: From Total Overcomers Anonymous to Death at Heaven's Gate," in *Sects, Cults, and Spiritual Communities: A Sociological Analysis*, ed. William W. Zellner and Marc Petrowsky (Westport: Praeger Publishers, 1998), 1-2. For more details on this meeting, see Balch, "The Evolution of a New Age Cult," Simross, "Invitation to an Unearthly Kingdom."

⁴⁰ Balch, "The Evolution of a New Age Cult," 23-24.

⁴¹ See "20 Missing in Oregon after Talking of a Higher Life," *New York Times*, Oct 7 1975, "Cults: Out of This World," *TIME*, October 20 1975, James R. Gaines, "Cults: Bo-Peep's Flock," *Newsweek*, October 20 1975, Douglas E. Kneeland, "500 Wait in Vain on Coast for 'the Two,' U.F.O. Cult Leaders," *New York Times*, Oct 10 1975, Austin Scott, "Music Teacher, Nurse Led Search for 'Higher Life'," *Washington Post*, Oct 18 1975.

⁴² Eve Muss, "'Grave Not Path to Heaven,' Disciples Told," *Oregon Journal*, 10 Oct. 1975.

⁴³ For example, the prospective candidate letter most frequently used the capitalized term "Next Evolutionary Level" rather than "next level," and spoke of "the process" rather than resurrection, transformation, or metamorphosis.

⁴⁴ Human Individual Metamorphosis, "Prospective Candidate Letter," <http://www.rkkody.com/rkk/rkkomat.htm> (accessed 13 November, 1997 [Defunct]).

⁴⁵ Balch and Taylor, "Salvation in a UFO," 61.

⁴⁶ Phelan, "Looking For: The Next World," 64.

⁴⁷ Paul McGrath, "UFO 'Lost Sheep' Tell Cult Secrets," *Chicago Sun-Times*, Oct 16 1975, 1. For comparatives purposes, consider Sheila Larson's response, "My faith has carried me a long way. It's Sheilaism. Just my own little voice. ... It's just try to love yourself and be gentle with yourself. You know, I guess, take care of each other." Robert Bellah et al., eds., *Habits of the Heart: Individualism and Commitment in American Life* (Berkeley: University of California Press, 1985), 221.

⁴⁸ Emphasis in the original. Hayden Hewes and Brad Steiger, *UFO Missionaries Extraordinary* (New York: Pocket Books, 1976), 88.

⁴⁹ Ibid., 102-3.

⁵⁰ Ibid., 100.

⁵¹ Muss, “‘Grave Not Path to Heaven,’ Disciples Told.”

⁵² Hewes and Steiger, *UFO Missionaries Extraordinary*, 101.

⁵³ Ibid., 132.

⁵⁴ Ibid., 91.

⁵⁵ Human Individual Metamorphosis, “Statement #1: Human Individual Metamorphosis.”

⁵⁶ Human Individual Metamorphosis, “Statement #2: Clarification: Human Kingdom - Visible and Invisible.”, Human Individual Metamorphosis, “Statement #3: The Only Significant Resurrection,” 2.

⁵⁷ Human Individual Metamorphosis, “What’s Up?.”

⁵⁸ For the earliest accounts of the Two’s meetings, see “20 Missing in Oregon after Talking of a Higher Life.”, McGrath, “UFO ‘Lost Sheep’ Tell Cult Secrets.”, Eve Muss, “No Disease Promised,” *Oregon Journal*, Oct. 9 1975, George Williamson, “‘It Was a Sham’: Why One Convert Left the UFO Cult,” *San Francisco Chronicle*, Oct 13 1975. The Oregon Journal published an edited version of the transcript of the Waldport meeting, which also did not mention the demonstration: Muss, “‘Grave Not Path to Heaven,’ Disciples Told.” Nearly all the publications after October 18, 1975 mention the Two’s belief in their impending demonstration, e.g. “Cults: Out of This World.”, Gaines, “Cults: Bo-Peep’s Flock.”, Scott, “Music Teacher, Nurse Led Search for ‘Higher Life’.”, Simross, “Invitation to an Unearthly Kingdom.” For the Two’s discussion of the demonstration in their interviews, see Hewes and Steiger, *UFO Missionaries Extraordinary*, 70, Phelan, “Looking For: The Next World,” 58.

⁵⁹ See McGrath, “UFO ‘Lost Sheep’ Tell Cult Secrets,” 26, Williamson, “‘It Was a Sham’: Why One Convert Left the UFO Cult,” 2.

⁶⁰ Hewes and Steiger, *UFO Missionaries Extraordinary*, 96. For the New Testament’s treatment of the three days preceding the resurrection, see Matthew 27:57-28:7, Mark 15:40-16:8, Luke 23:50-24:5, and John 19:38-20:18.

⁶¹ Phelan, “Looking For: The Next World,” 58.

⁶² This episode is retold in Hewes and Steiger, *UFO Missionaries Extraordinary*, 18.

⁶³ As cited in Ibid., 16.

⁶⁴ For an example of Bo and Peep’s implicit identification as the two witnesses, see their interview with Brad Steiger, where they stated, “we are hesitant about telling the world that we are related to the passage in Revelation because they immediately, in their human way, think that what we’re saying is, ‘Hey, look at us! We’ve come to fulfill that.’” For a more explicit statement, see their interview with James Phelan, who summarized that “Bo

and Peep maintain that they are the Biblical Two.” Also consider Applewhite’s much later statement, written in the third person, that the two “came to believe that they were the Two Witnesses mentioned in the Book of Revelations. [sic]” “Bo and Peep Interview with Brad Steiger, 7 January 1976,” 96, Heaven’s Gate, “’88 Update,” in HGA, 3, Phelan, “Looking For: The Next World,” 58.

⁶⁵ Human Individual Metamorphosis, “What’s Up?.”

⁶⁶ For the historical development of dispensationalism, including an institutional and cultural history of its spread through nineteenth-century evangelicalism, see George M. Marsden, *Fundamentalism and American Culture: The Shaping of Twentieth Century Evangelicalism, 1870-1925* (New York: Oxford University Press, 1980). For more on the twentieth-century, see A.G. Mojtabei, *Blessed Assurance: At Home with the Bomb in Amarillo, Texas* (Boston: Houghton Mifflin, 1986).

⁶⁷ Marsden, *Fundamentalism and American Culture*, 51.

⁶⁸ Ibid., 59. Marsden also includes an excellent graphic of the seven dispensations in his book, on pages 64-5. For Scofield’s systemization, see C.I. Scofield, ed., *The Scofield Reference Bible* (New York: Oxford University Press, 1901).

⁶⁹ See *The Scofield Reference Bible*, p. 1349, n. 1 (commenting on Revelation 19:19); p. 1269, n. 1 (on 1 Thessalonians 4:17); and p. 1228, n. 1 (on 1 Corinthians 15:52).

⁷⁰ In the third statement the Two used the term dispensation to refer to a current era. Human Individual Metamorphosis, “Statement #3: The Only Significant Resurrection.”

⁷¹ Balch and Taylor, “Salvation in a UFO,” 163. Mainstream dispensationalists believe that during each historical epoch, God related to human beings differently. The legal dispensation, for example, required humans to follow the Mosaic laws, whereas the Edenic dispensation merely required Adam and Eve’s obedience. For Nettles and Applewhite, the “next level” related to humans differently during the five historical dispensations, predicated on the example given humanity by the named figure (Elijah, Enoch, etc.)

⁷² Descriptions of the first through fifth dispensations appear in “A Statement Prepared by The Two,” 164-8. I cite the discussion of the 6th dispensation, Ibid.: 168.

⁷³ Ibid.: 169.

⁷⁴ Ibid.: 159.

⁷⁵ The Two’s discussion of “energy” is also very reminiscent of the New Age. Ibid.

⁷⁶ Here, as in several other of Bo and Peep’s materialized explanations of religious concepts, the Two attempted to have religion and science both ways, that is to both claim a materialistic basis of their religious beliefs as well as admit that they could not actually

prove them. The two's admission that one cannot observe the energy and another that they could not explain the actual cause of the energy emission served in that regard. I discuss this in greater depth in chapter six.

⁷⁷ I refer to chapter 11 of the text, "The Ultimate Trip." Hal Lindsay, *The Late Great Planet Earth* (New York: Bantam Books, 1970). For comparison purposes, consider also the more recent dispensationalist fiction series *Left Behind*, the first of which was published shortly before the Heaven's Gate suicides in 1997, which not only assumes the concept of the rapture but begins with a depiction of it. Tim F. LaHaye and Jerry B. Jenkins, *Left Behind: A Novel of the Earth's Last Days* (Wheaton, Ill.: Tyndale House Publishers, 1995).

⁷⁸ This of course raises the obvious question appears: how did premillennial dispensationalism end up in Heaven's Gate? Raised a Presbyterian, Applewhite's birth-tradition is not known for a particular affinity to premillennial thought. Yet dispensationalism held an allure even for Presbyterians, so much that Grace Presbytery, encompassing 53 counties, including the city of Dallas, went so far as to declare dispensationalism a heresy. (Randall Herbert Balmer, *Mine Eyes Have Seen the Glory: A Journey into the Evangelical Subculture in America* (New York: Oxford University Press, 1989), 35.) Another possible explanation is Nettles' background as a Baptist, most likely a Southern Baptist. (See n. 1.) Baptists are notoriously difficult to categorize, and no surveys previous to 1984 exist on the millennial outlook of Baptists. The 1984 survey revealed that 63 percent of Southern Baptist ministers self-characterized as premillennialists, and roughly half of those declared themselves dispensationalists (31 percent). (Helen Lee Turner and James L. Guth, "The Politics of Armageddon: Dispensationalism among Southern Baptist Ministers," in *Religion and Political Behavior in the United States*, ed. Ted G. Jelen (New York: Praeger, 1989), 190.) However, by her own admission Nettles "always believed more strongly in the Eastern religions," making her an unlikely vector of Christian dispensationalism. (Nettles, as quoted in Balch, "Bo and Peep," 42.) A more probable explanation is that Nettles and Applewhite picked up premillennialism from the surrounding culture, even if neither had any formal religious background in groups espousing dispensational premillennialism. For more on this topic, see Benjamin E. Zeller, "Scaling Heaven's Gate: Individualism and Salvation in a New Religious Movement," *Nova Religio: The Journal of Alternative and Emergent Religions* 10, no. 2 (2006).

⁷⁹ Balch and Taylor, "Salvation in a UFO," 169.

⁸⁰ Muss, "'Grave Not Path to Heaven,' Disciples Told."

⁸¹ "Bo and Peep Interview with Brad Steiger, 7 January 1976," 129.

⁸² In addition to the already cited statement in the Hewes and Steiger book, see the first statement's closing paragraph, "Those who can believe this process and *do* it will be 'lifted up' individually and 'saved' from death – literally." Human Individual Metamorphosis, "Statement #1: Human Individual Metamorphosis."

⁸³ Max Planck, *Where Is Science Going?*, trans. James Murphey, English ed. (London: George Allen & Unwin Ltd., 1933), 214. The context of this quote is quite revealing. The final chapter of the book includes a conversation between Planck and his friends James Murphey and Albert Einstein. Murphey asked Planck if he thought that science “might be substituted for religion,” to which Planck responded, “Not to a skeptical state of mind; for science demands also the believing spirit. Anyone who has been seriously engaged in scientific work of any kind realizes that over the entrance to the gates of the temple of science are written the words: Ye must have faith. It is a quality which the scientists cannot dispense with.”

⁸⁴ Emphasis in the original. Human Individual Metamorphosis, “Statement #1: Human Individual Metamorphosis.”

⁸⁵ Human Individual Metamorphosis, “Statement #3: The Only Significant Resurrection,” 2.

⁸⁶ Ibid.

⁸⁷ As quoted in Balch and Taylor, “Salvation in a UFO,” 106. Another similar statement, by two members quoted in the *Houston Chronicle*, echoed this position: “We are not a cult or group. We are individuals who share a common goal. But we each achieve that goal in very individual ways,” they declared. Pat Reed, “Two Women UFO Disciples Reveal Identity; Say They Are Not Cult,” *Houston Chronicle*, Nov 26 1975.

⁸⁸ “Bo and Peep Interview with Brad Steiger, 7 January 1976,” 110.

⁸⁹ Williamson, “‘It Was a Sham’: Why One Convert Left the UFO Cult,” 2.

⁹⁰ Contrast, for example, with the lack of any discussion of the need for faith or belief in the other published accounts that include extended interviews or comments from members of H.I.M., McGrath, “UFO ‘Lost Sheep’ Tell Cult Secrets.”, Muss, “No Disease Promised.”, Penson, “During the Summer of 1974 UFO Couple Visited Boise Men.”, Reed, “Two Women UFO Disciples Reveal Identity; Say They Are Not Cult.”, Simross, “Invitation to an Unearthly Kingdom.”

⁹¹ Hodgetts, “UFO Cult Mystery Turns Evil,” 13.

⁹² Phelan, “Looking For: The Next World,” 58.

⁹³ Ibid., 62.

⁹⁴ Human Individual Metamorphosis, “Statement #2: Clarification: Human Kingdom - Visible and Invisible.”

⁹⁵ Human Individual Metamorphosis, “Prospective Candidate Letter.”

⁹⁶ Robert W. Balch, “‘When the Light Goes out, Darkness Comes’: A Study of Defection from a Totalistic Cult,” in *Religious Movements: Genesis, Exodus, and Numbers*, ed. Rodney Stark (New York: Paragon House Publishers, 1985), 21.

⁹⁷ Balch, “Waiting for the Ships,” 154.

⁹⁸ Balch, “A Study of Defection,” 21-23.

⁹⁹ After their interviews with Steiger and Phelan, the next primary sources available for scholars are a set of behavioral guidelines called “The Seventeen Steps,” written in 1976, a collection of aphorisms, “Ruffles,” composed in 1979, and a short booklet, “Preparing for Service,” prepared in 1985 before the death of Bonnie Lu Nettles. Here I focus on a section of the final of these materials, the “Preparing for Service” booklet. Heaven's Gate, “Preparing for Service,” (1985), Heaven's Gate, “Ruffles: Snacks for Thinkers,” (1979), Heaven's Gate, “The 17 Steps,” in HGA, sec. 2, 8 (Originally Produced 1976). The latter two sources were available from Rkkody, “Other Heaven's Gate Materials,” <http://www.rkkody.com/rkk/rkkomat.htm> (accessed 13 November, 1997 [Defunct]).

¹⁰⁰ The former member used the later names of the Two, Ti (Nettles) and Do (Applewhite), which I have replaced with Bo and Peep. Heaven's Gate, “Preparing for Service.”

¹⁰¹ Ibid.

¹⁰² The movement would briefly operate under the “Anonymous Sexaholics Celibate Church” in 1987, and a year later in 1988 use the name “Total Overcomers Anonymous.” They did not use the name “Heaven's Gate” until the final years of the movement's history.

¹⁰³ Heaven's Gate, “Preparing for Service.”

¹⁰⁴ One might compare the Heaven's Gate members' desire to control their body's chemistry to the practice of alchemy, especially as developed in Christian, Daoist, and Hindu (Tantric) circles.

¹⁰⁵ Heaven's Gate, “Preparing for Service.”

¹⁰⁶ Stmody, whom we will meet in the next chapter, wrote that “[t]o the best of my knowledge, using ‘sex magic,’ ‘black magic,’ Tantric or Daoist techniques to ‘raise the kundalini,’ to ‘raise consciousness,’ ‘open chakras,’ or to awaken the ‘spiritual eye’ are backward distortions.” Stmody, “Evolutionary ‘Rights’ for ‘Victims,’” in HGA, sec. A, 71-79 (Originally Produced 1996). Applewhite, then writing under the name Do, rejected a similar concept, the Tantric view of the *kundalini* energy. For his view on *kundalini*, see Heaven's Gate, “Beyond Human—the Last Call, Session 6,” in HGA, sec. 4, 62-73 (Originally Produced 1992), 69, Heaven's Gate, “Beyond Human—the Last Call, Session 7,” in HGA, sec. 4, 74-84 (Originally Produced 1992), 80.

¹⁰⁷ Heaven's Gate, "Preparing for Service."

CHAPTER 6: SCIENCE AND HEAVEN’S GATE, 1986-1997

From Human Individual Metamorphosis to Heaven’s Gate

In March 1997, police in the posh San Diego suburb of Rancho Santa Fe, California, burst into a sprawling mansion in a luxurious gated community to discover thirty-nine decomposing bodies.¹ In ritual precision, the members of the group had orchestrated a mass suicide, the ultimate terminus of a new religious movement founded two decades earlier. A media circus ensued, each new story describing an even more bizarre “religious cult.” The popular media linked the group to the rise of the Internet and the appearance of the Hale-Bopp comet, while other stories linked them to the French-Canadian Order of the Solar Temple. Dubbed “Heaven’s Gate,” the name of the group’s webpage, the movement was none other than Human Individual Metamorphosis, still led by Marshall Herff Applewhite in its last Earthly days and holding the final allegiance of members who had joined in Los Angeles, Waldport, and other meetings from H.I.M.’s early days.

Heaven’s Gate had transformed in the twenty years since Nettles and Applewhite founded it. Bonnie Lu Nettles had died in 1985, leaving Applewhite the sole leader of the religious group in its final decade. Applewhite, who renamed himself “Do” (pronounced “doe”) and his deceased co-founder “Ti” (“tea”), had introduced several new doctrines.² Do né Bo had intensified the apocalypticism of the movement, embracing a catastrophic view of the end-times more in keeping with traditional dispensationalism. After Nettles’s death, he had upgraded Ti né Peep from equal to

superior, and declared her the chief Next Level administrator of the planet Earth, at times implying that she was the entity that the ancient Hebrews addressed as God. He stressed government cover-ups of UFO sightings and conspiracies to hide imprisoned extraterrestrials, both of which indicated an increasing tension with American wider society and suspicion of American governance. Mirroring the classical Calvinist approach of the forbearers of his own Presbyterian birth tradition, Do even embraced the concepts of grace and election, albeit with a materialistic twist. And most crucially, Do transformed the group's understanding of salvation, eschewing the materialistic naturalism of H.I.M.'s early days and adopting a more spiritual concept of the transmigration of the soul. Overall, Heaven's Gate demonstrated a two-fold approach in its final years: on the one hand, they extended thoroughly materialistic scientific-sounded explanations of several religious concepts, but on the other hand they retreated from several of H.I.M.'s naturalistic approaches. As I shall argue, the latter departures represented exceptions that proved the rule of materialistic reinterpretation. Heaven's Gate during its final decade continued to absorb science into religion though appropriation of science's basic methodological assumptions, materialism and naturalism.

A Movement in Transition: the '88 Update

Though the movement did not make national headlines again until after the mass suicides, Heaven's Gate did attempt to broadcast its views several times before that time through a flurry of videos, advertisements, books, and websites, peaking around 1993 and then again in 1997. Yet before these last burst of activity, the movement produced a short booklet titled *'88 Update*, a publication that they described as mailing to "various

New Age Centers, Health Food Stores, writers, preachers, ufologists, monasteries, and so on.”³ Written by Do in 1988, the booklet described the group’s origins and history, provided some background of the “UFO Two,” as Do called himself and his partner, and told the story of how Human Individual Metamorphosis had continued to grow after its disappearance from the limelight. It summarized the movement’s beliefs and theological positions, and concluded with a set of recommended readings. Though the group made no attempt to recruit through the booklet, and included no contact information, they did include a permission statement to duplicate the material, and a request that readers who “want to help us” disseminate it “far and wide.”⁴ Overall, the text gave the impression of taking part in a conversation with both ufologists and religionists, with frequent mentions of particular UFO researchers and UFO sightings alongside biblical quotes and a footnote written especially for “religious scholars.”⁵ A three-page list of recommended readings included a medley of religion, ufology, and paranormal selections, ranging from the Bible, the Dead Sea Scrolls, and the Nag Hammadi library, to UFO crashes in Roswell, government conspiracies to cover-up extraterrestrial life, and accounts of close encounters with space aliens.⁶

The ’88 *Update* both extended and curtailed Heaven’s Gate’s materialistic and naturalistic approach to religion. (Though I call the group “Heaven’s Gate,” it is unclear how the movement referred to itself at this time.) The extensions followed the patterns that the Two had set a decade earlier, namely the movement’s view of Christ and of the physical nature of heaven and the heavens. After a brief description of the Two’s meeting and early religious quest, the ’88 *Update* moved to the question of the group’s basic doctrine, invoking just such materialistic understandings. Referring to his

movement in the third person, Do wrote that “they felt that they really had no choice but to tell the world what the real Kingdom of Heaven was—a physical evolutionary level, instead of some mystical cloud-and-harp, spiritual existence. ... They knew that Jesus had come or been sent to share exactly the same truth with ‘those who had the eyes to see,’ but that His body might have been a Next Level hybrid by means of artificial insemination, offering Him more Next Level capabilities.”⁷ Here the update echoed the Two’s earliest printed declaration, the “Human Individual Metamorphosis” statement (Statement #1), which the ’88 *Update* later quoted in its entirety. Do equated heaven with the heavens, and like the first statement’s disparaging dismissal of those who put their faith in “some savior” and “some heaven,” the update booklet contrasted the physicalist approach of Heaven’s Gate with belief in “some mystical cloud-and-harp, spiritual existence.” The addition of the term ‘evolutionary’ further cemented Heaven’s Gate’s attempt to employ scientific rhetoric in distinction to the normally religious language used to describe heaven.

The ’88 *Update*’s depiction of Christ extended the materialistic approach of earlier Heaven’s Gate sources. Earlier, especially in their conversation with ufologists Brad Steiger and Hayden Hewes, the Two had described Jesus as leaving behind a body to incarnate on Earth, completing a metabolic transformation through the Transfiguration, repairing himself after the Crucifixion, and returning to the literal heavens in a UFO that humans referred to as a cloud of light. Now, Do offered that “His body might have been a Next Level hybrid by means of artificial insemination, offering Him more Next Level capabilities.” This characterization, no doubt even more offensive to many Christians than the earlier material, further indicated the group’s materialistic view of Christ: Jesus

might be a human-extraterrestrial hybrid produced by artificial insemination. Such a position both described and defined Christ using purely naturalistic, scientific language, and ascribed his nature to a technological act, that of artificial insemination.

One way to understand this statement is through changes in the wider UFO subculture, which by the late 1980s had developed a fixation with human-alien hybrids and the possibility in both extraterrestrial as well as government experiments in genetically engineering such beings. Regardless of possible influences, Do's musing on the subject indicated a continuation of the group's materialistic rereadings of religion. Christians have argued over the nature of Christ's essence since the first century, with some schools claiming him as a sort of "hybrid" between human and God, and others as purely divine (doceticism) or purely human (adoptionism).⁸ Do and Heaven's Gate took the "hybrid" side of this debate, the same that the orthodox church also accepted. In other words, the movement had translated into the language of science what many Christians accepted on a religious level, that Christ was both human and divine at the same time. By accepting other ufologists' suspicions about government experiments and cover-ups, Do and Heaven's Gate also reiterated their rejection of wider American society, a theme that the movement had developed since its earliest days of emphasizing an immediate exodus from Earth.

Do also turned in the '88 *Update* to the wider question of the physical beings who dwelt in the heavens. As far back as the first three statements, the group had equated the extraterrestrials who lived in the next level with the members of God's kingdom, and the update continued this perspective.⁹ However, the movement's earliest materials gave few details on what life would be like in this next level, nor on the qualities of the next level

entities, focusing almost exclusively on the need to follow the process of overcoming one's humanity in order to ensure a metamorphosis into such a creature. Unlike the vague allusions to membership in a kingdom of heaven in those earlier H.I.M. materials, the update began to provide specifics of the next level entities. Although later sources, such as the "Beyond Human" video series the group produced three years later, would provide many more details of these alien creatures—the group's 1997 webpage even included illustrations—the '88 *Update* offered basic details of next level biology.

These specifics linked Heaven's Gate vision of the material and physical life of heaven with the same process of overcoming human attachments that they had upheld since their earliest days. Just as human beings needed to overcome sexuality and attraction to other humans, the next level aliens possessed no reproductive systems, eschewing biological reproduction as beneath them. Do explained, "there are apparently no active reproductive organs in the physical bodies of members of the Next Level, though the bodies of some of the younger (less advanced) members of the Next Level, if examined, might show signs of internal remnants of reproductive organs long since all but atrophied. Therefore, it seems you could not inherit one of those bodies until you no longer have any use for activities involving the reproductive organs." Taking a swipe at those who possessed a differing view of life in heaven, he added, "[t]hose who think their Heaven will have husbands and wives ... must know of some other place than the Heaven our Heavenly Father exists in."¹⁰ Repeating on of Heaven's Gate's tropes, namely the denial of gender and sexuality, Do dismissed those who upheld the idea of gender in heaven. Yet he concurred that life in the heavens was a physical, natural reality, and not a spiritual state or supernatural existence. Next level inhabitants had

organs and one might even “examine” their bodies.

Again, the manner in which Do depicted the physical nature of the next level alien beings probably developed from evolutions in the UFO subculture, which by the 1980s included discussions of government labs performing experiments on captured extra-terrestrials and direct encounters between human beings and alien creatures.¹¹ Do and the other members of Heaven’s Gate accepted these accounts, explicitly stating in the ’88 *Update* that governments “have retrieved ‘crashed’ spacecrafts, live ‘EBE’s’ (extraterrestrials), and numerous bodies, autopsies of which have revealed characteristics mentioned previously (even though investigators interpret these occurrences incorrectly).”¹² Accepting what many other ufologists also believed, that the government performed medical experiments on captured aliens, Do interpreted this belief in light of Heaven’s Gate’s position that the heavens represented heaven. Unless one “interpreted these occurrences incorrectly,” one would come to the same conclusions, he insisted: next level extra-terrestrials possessed bodies, but not reproductive organs.

For the first time, Heaven’s Gate offered an explanation of how the next level produced additional members. In keeping with their overall naturalism, Do offered a strikingly materialistic view of the operation of heaven. “Our understanding is that Next Level bodies (the normal bodies for that Kingdom level, in the same way that human bodies are the norm for the human kingdom) are grown as plants from a vine, and at the end of their gestation period, they are fully grown and functional, not ‘babies’ as are the products of human ‘seed-bearing plants.’ There seem to be actual grafting processes used and genetic binding from Older Members. ‘I am the vine, ye are the branches’ —could that mean something more than previously thought?”¹³ This passage combined a direct

quote from the King James Bible (John 15:5) with the idea of “genetic binding” between different members of heaven, revealing a specific manner in which Heaven’s Gate absorbed science into religion. The overall religious concept remained, i.e. a heaven where the members of Heaven’s Gate hoped to travel, but the specifics used the language and concepts of science. The Older Members of heaven used genetic technology to grow new heavenly beings on vines.¹⁴

Cognitive Dissonance and the Retreat from Materialism

While the '88 *Update* generally enhanced materialistic views of religious topics, it also retreated from two central concepts that the Two had labored to portray in a purely naturalistic and materialistic manner: the demonstration and the metamorphosis. Unlike the naturalizing approach to describing the occupants of heaven, the booklet employed a supernatural and symbolic approach to re-explain these two concepts. The demonstration, it declared bluntly, no longer represented the physical death of the Two’s bodies and subsequent biological repair, but a symbolic death by the news media. The update explained, “Ti and Do were in Las Vegas when the TV network news programs all broke the story about the two. Now because of the kind of publicity that had come out across the country, climaxed by the networks, Ti and Do felt that further meetings were pretty hopeless ... they grieved literally for days, feeling like they had been shot down by the media and the mission was dead. They received instruction to not walk into a physical demonstration but rather to know that the ‘killing in the street’ of the two witnesses had occurred at the hands of the media.”¹⁵ Instead of demonstrating the truth of the process and the possibility of physical, chemical, bodily metamorphosis, the leader

and members of Heaven's Gate now believed that the demonstration provided a symbolic example of how the Two could soldier on, despite adversity, and continue to lead the group. Unlike other acts of reinterpretation within the group that transformed spiritual concepts to physical ones, this one proceeded on the opposite track, from a naturalistic understanding to a more symbolic one.

The best explanation for this reversal is also the simplest: the demonstration as predicted did not occur, and the Two needed to respond to this unexpected reality. Rather than jettison the concept altogether, they moved to a more symbolic reading, one that allowed them and the members of their movement to both confirm the preexisting belief in the demonstration as well as their experience of its failure to occur as expected. In doing so, the Two minimized what Leon Festinger termed "cognitive dissonance." In his flawed but valuable study of a group he called the "Seekers," a small UFO religion, Festinger utilized the concept of dissonance in order to explain how the Seekers responded to a similar failed prophecy. The predicted events in the two groups are quite similar – for the Seekers, the UFO that they sought did not land, and for Heaven's Gate, the Two did not undergo martyrdom and subsequent rapture aboard a UFO. The result was also the same: cognitive dissonance. "The fact that the predicted events did not occur is dissonant with continuing to believe both the prediction and the remainder of the ideology of which the prediction was the central item," wrote Festinger.¹⁶ In the case of the Seekers, the disappointed believers attempted to reduce the dissonance by proselytizing, Festinger argues. In the case of Heaven's Gate, Ti and Do reversed their normal naturalizing hermeneutics and provided for their followers a new symbolic reading of the demonstration, thereby satisfying Festinger's requirement that the group

minimize dissonance in order to survive: “[t]he dissonance would be largely eliminated if they discarded the belief that had been disconfirmed, [or] ceased the behavior which had been initiated in preparation for the fulfillment of the prediction.”¹⁷

The cognitive dissonance model also explains the other interpretive shift in Heaven’s Gate’s *’88 Update*, their view of the metamorphic process itself. Just several years earlier, the movement had encapsulated its materialistic approach to the metamorphosis in the meditative prayer, “A Focusing,” which evoked a chemical change in the body and the slow biological transformation from human being into next level alien. The update bluntly rejected this earlier position, which had served as the heart of the group’s approach to salvation since the Two’s very first statements. Using the third person, the *’88 Update* declared,

Prior to 1981, their understanding was that they were working toward graduation from the human kingdom into the Next Level, and that this graduation process involved physically changing over their human vehicles (metamorphosing) into Next Level vehicles. They now believe that in reality they were in the Kingdom of Heaven before entering these human bodies. But because of the present awareness of their Next Level consciousness, they know that they are in that Kingdom now, though occupying human vehicles in order to do a task.¹⁸

The leader of Heaven’s Gate now explained that the group’s members did not hope for a biological transformation into next level beings, but believed themselves already next level extraterrestrials who only currently inhabited human “vehicles” for some sort of task or purpose. The *’88 Update* did not expand on the ramifications of this transition, though later sources would do so. It did however muddy the waters that previously had offered so naturalistic an approach to salvation. Instead of converting human bodies into biologically alien creatures and then flying away aboard UFOs, the members of Heaven’s Gate now believed that their consciousnesses would transfer out of their human bodies

and into new next level ones. The notion of the transmigration of mind and consciousness replaced that of a physical, material transformation, and of physical, material transportation aboard a flying saucer.

Do both claimed and limited materialistic naturalism in explaining the process by which he and his followers incarnated on Earth. “They were briefed as a crew aboard a spacecraft about how they would incarnate into human vehicles in order to do a task,” he wrote in the update. “Some left their bodies behind in ‘cold storage,’ or the Next Level’s wardrobe, for the duration of this task. Others were in ‘spirit,’ having not yet earned Next Level bodies since having left the human kingdom.”¹⁹ While the conceptualization of physical next level bodies in the heavens reinforced the traditionally physicalist approach that the Two had assumed, Do’s depiction of next level creatures existing “in ‘spirit’” actually directly contrasted his earlier rejection of this view, as he declared numerous times that next level space aliens had physical bodies and did *not* exist in spirit forms. A decade later, the belief in the transmigration of consciousness instead of bodily metamorphosis would permit the adherents of the movement to accept the destruction of their human bodies, i.e. suicide, as a viable method of freeing their minds to journey to the next level. In 1988, it stood as a reversal of one of the group’s longstanding central tenets.

The best explanation for this transformation and reversal lies in the death of Bonnie Lu Nettles, Applewhite’s co-founder and co-leader of the movement. Her 1985 death of liver cancer both shocked and reshaped the group. Since the earliest days of Heaven’s Gate, Ti and Do had taught that a UFO would descend to Earth and in a technological reenactment of Revelation’s prophecy of the rapture of the faithful, bodily

save the select few true believers. Yet no extraterrestrials appeared to whisk away Nettles before her body succumbed to cancer, nor did the saucers land to claim her physical body. This was likely a moment of massive cognitive dissonance in the movement, though no available documents survive to prove this conjecture. Heaven's Gate survived because Do introduced the supernatural or symbolic reading of the metamorphosis into the movement's theology. Whereas previously, the chosen few would board the UFO in bodily form, the '88 *Update*, the first post-1985 document the movement produced, made no mention of the earlier belief. Language referring to the body as a "vehicle" proliferated in the '88 *Update*, and by 1992 the body had become merely a "container."²⁰ In the booklet, Do explained that "a member of the Next Level wears a body like a suit of clothes."²¹ By introducing this symbolic reading of the metamorphosis and replacing the earlier biological, chemical, physical one, Do transformed Nettle's death into Ti's soul's departure for the literal heavens, thereby overcoming the cognitive dissonance that her death entailed.²² The recasting of both the demonstration and the metamorphosis in symbolic and supernatural terms, rather than naturalistic and physical ones, stand out from other transformations in the movement. But they are the exceptions that proved the rule of naturalization. Both served to heal cognitive dissonance and prevent the complete dissolution of the movement. Overall, the '88 *Update* revealed a continuation of Heaven's Gate's absorption of naturalism, with the exception of the notions of demonstration and transformation.

"Beyond Human": Physical Beings in the Material Heavens

Heaven's Gate disappeared again after the '88 *Update*, making no effort to

proselytize or communicate with the outsider world, until late December 1991, when the group produced a series of satellite television broadcasts called “Beyond Human—The Last Call.”²³ Shortly thereafter, Do and his followers transferred “Beyond Human” to video-cassette, and in the coming years (1993-1994) traveled across the country in small groups to hold public meetings and present their videotaped teachings.²⁴ To prepare the way for their evangelization, Heaven’s Gate—at the time using the name “Total Overcomers Anonymous”—purchased a one-third page advertisement in *USA Today* on May 27, 1993, later reprinted in about two dozen alternative newspapers ranging from Los Angeles (*L.A. Resources*) to Boston (*Boston Phoenix*). They titled the advertisement “‘UFO Cult’ Resurfaces with Final Offer,” and used it to declare their movement’s fundamental religious positions. Together with the “Beyond Human” broadcasts, this advertisement and several posters that Total Overcomers Anonymous utilized during this period offered a comprehensive picture of the movement’s religious approach during the early 1990s. Heaven’s Gate’s period as Total Overcomers Anonymous demonstrated the same basic pattern that characterized the movement in the previous decade: an attempt to convey a materialistic, physicalist, tangible vision of heaven and its inhabitants.

If the '88 *Update* provided a glimpse of how Do and his followers had both limited and extended the naturalizing impulse of Human Individual Metamorphosis, then the twelve part video and satellite series, “Beyond Human” offered a scenic vista. Over the course of thirteen and a half hours, Do and his students provided a relatively complete look at their movement’s ideological position on everything from the nature of religious community to the fall of Lucifer. The video series continued the overall attitude of the preceding years, representing a naturalized approach to religious topics that emphasized

the physical nature of religious concepts. Much of what Do presented in “Beyond Human” followed in direct line from his and Ti’s earliest materials, for example the insistence on the material physical nature of the next level heavens and the beings who lived there. Do added further explanations of the tangible physical reality of Christianity’s major theological actors, Christ, God the Father, and Lucifer, as well as a naturalized account of the concepts of grace and election, two linked tenets that he no doubt recalled from his Presbyterian theological education. Like the ’88 *Update* booklet, the “Beyond Human” video and satellite series eschewed the earlier concept of physical metamorphosis, envisioning the process of salvation as the transmigration of the soul or consciousness. The group reflected this with a new name featured on the videotape’s sleeves: “Total Overcomers Anonymous,” or T.O.A., which emphasized the continued focus on *overcoming* the human condition, thereby replacing the earlier moniker Human Individual Metamorphosis, with its now-problematic concentration on physical metamorphosis. The series continued the ’88 *Update*’s symbolic reading of bodily transformation, and extended it, explicitly embracing a view of the soul as completely independent of the body.²⁵

The real, physical nature of the next level remained a core tenet of Do and T.O.A.’s materialistic approach to religion. The movement literally inscribed this position onto the dust-jackets of the “Beyond Human” series, which began with a summary and exhortation: “This series of tapes explains simply, clearly, and understandably how we get to ‘Heaven.’ *Don’t stop! Read on!* It explains how Heaven is not where we go after we die ‘if we are good,’ but is a physical Kingdom Level above the human kingdom.” The jacket repeated this theme twice more, repeating the phrase

“the literal physical Heavens.”²⁶ If a viewer decided to watch the video, or tuned into the satellite broadcasts, they encountered the same claim in its opening minute: heaven was a real, physical, tangible place. After introducing himself and indicating two students who would offer questions during the session, Do jumped into the central points of his movement’s message. Using the past tense to explain his and Ti’s most crucial discovery during the 1970s, he declared that they “talked about the Kingdom of Heaven—the *physical* Kingdom of Heaven, not a spiritual Kingdom of Heaven.” Retreating a moment, perhaps remembering that viewers had no background on his Total Overcomers Anonymous movement, he added, “[n]ot that it isn’t spiritual, but it is not etheric. [sic] It is not only spiritual, which represents the character of the soul, but it is a physical kingdom as well.”²⁷ This restatement of what had remained a key notion, combined with an almost-apologetic defense of his dismissal of the idea of the “spiritual,” immediately situated Do and T.O.A. as a religion unlike other religions, one that insisted on materialism and naturalism over the spirit and the supernatural.

Do repeated this central claim throughout the series, for example his statement during the second session that “I’m talking about a physical place, a part of the Heavens, the physical part of the heavens that only those can go who are members of *our* Father’s House, *our* Father’s corporation, in *His* Kingdom—the one which belongs to the Creator.”²⁸ Total Overcomers Anonymous’ advertising material trumpeting this claim, often declaring it in a large font, bold-faced, or the top of advertisements and posters. The most frequent statement, repeated verbatim in the *USA Today* advertisement and many of the posters, declared that “The *true* Kingdom of God, the ‘Headquarters’ of all that is, is a many-membered Kingdom which physically exists in the *highest*, most *distant*

Heaven.”²⁹ Another version, one used to advertise March 1994 meetings in south Florida, explicitly stressed the physical nature of the next level heavens using an italicizing font: “The Evolutionary Kingdom Level Above Human: the *only real* heaven[,] a *physical* Kingdom Level that *cannot* be entered ‘after you die[,]’ one that exists in the literal heavens.”³⁰ Total Overcomers Anonymous’s heaven, both Do and the posters insisted, was physical and real, and not a spiritual concept or ethereal symbol.

The viewer of “Beyond Human” would correctly assume that Do and his students believed themselves to live in a populous universe. At the same time that Total Overcomers Anonymous upheld a physical heaven, they bolstered their view of the physical nature of the beings that lived in the heavens, namely the major theological figures that the movement had incorporated from Christianity: angels (next level aliens), devils (extraterrestrials expelled from the next level), God the Father (the Chief next level alien), Christ (a leading next level alien), and Lucifer (the head of the expelled extraterrestrials). Each existed in a purely material, physical, tangible form.

The next level aliens comprised the most important category of the numerous beings who inhabited the universe. Though Ti and Do, then using the names Bo and Peep, had declared the reality of the next level beings sixteen years earlier, in “Beyond Human” Do provided explicit details about the material and bodily nature of the beings. A peaceful, enlightened, rational, and organized race, Do explained that these space aliens occupied themselves with managing the affairs of the universe. Functioning on a level far surpassing humanity’s limited mental, biological, and moral resources, the next level aliens were selfless and group-minded, living solely for the purpose of functioning within an immense celestial bureaucracy. Immune to the ravages of time, genderless,

needing no sustenance, and nearly immortal, none of the normal tethers of human life limited them. The next level aliens functioned as materialistic equivalents to the traditional Jewish-Christian-Muslim notion of angels.

Like the early material produced by H.I.M., which extolled the possibility of metamorphosing into such a creature, Do promised in “Beyond Human” that one could become a next level alien through mastering oneself and overcoming one’s humanity, which could result in the transference of consciousness from a human vehicle (or body) to a perfected next level one. That new form presented numerous advantages: “[y]ou take on a vehicle that is imperishable and incorruptible. As long as it is sustained in an advanced, incorruptible, imperishable environment, it cannot be destroyed. You have eternal life. Not only does the soul have life, but you can wear a vehicle that, for all intents and purposes, doesn’t need to decay. It doesn’t have any age, it doesn’t come from a baby, it doesn’t get old and need to be changed out for another one. There’s no loss of consciousness.”³¹ Next level aliens represented the ideal form of biological life: perfect, eternal, and incorruptible. As Total Overcomers Anonymous’s final poster declared, the next level “is a genderless (sexless), non-mammalian (though certainly non-reptilian), crew-minded, service-oriented world that finds greed, lust, and self-serving pursuits abhorrent.”³² This poster both rejected what Do and Heaven’s Gate considered the mainstays of American culture—greed, lust, and a self-serving attitude—as well as competing religious views of the heavens. Rather than envision a heaven of angels-on-wings and the souls of the saints, Do foresaw one of eternal biological, that is material and natural, beings. However, like the Christian view of heaven, Do and his T.O.A.

movement offered the chance for immortality in the heavens, albeit in a purely *material* form.

The advertisements and posters repeated Do's claim, striving to show the ideal, perfected nature of the next level aliens, but also repeating their material and physical nature. The next level beings' physical natures did not represent a new position for the group—Bo and Peep adamantly defended this view in their earliest material—but rather a point of stress as Total Overcomers Anonymous brought its message to a wider audience. Others believed in spiritual beings inhabiting heaven, but their own movement claimed biological extraterrestrials. The *USA Today* advertisement explicitly declared of Earth and the next level, “[b]oth Kingdom Levels are physical and biological. However, the human kingdom is made up of mammalian – ‘seed-bearing’ – plants or containers, while the Kingdom of God is made up of non-mammalian, non-seed-bearing ‘containers’ for souls.”³³ Posters repeated this central claim, for example the set of posters used to advertise meetings in south Florida, which explained that “in the literal Heavens, [the beings have their] own unique biological ‘containers’ or bodies.”³⁴

At the pinnacle of the hierarchy of next level aliens sat a figure that Do called the Chief of Chiefs, the Father, or God. “There’s only one Creator in all that exists, and that’s the ‘Top Man,’ that’s the Chief of Chiefs, the God of Gods,” explained Do in the second session of the “Beyond Human” series.³⁵ Here Do combined explicitly religious terminology with that more befitting the business world, equating God with the “Top Man.” In later material, Do and members of Heaven’s Gate would unequivocally explain that God also possessed a biological physical body, for in the case of the “Beyond Human” series and the related advertising material, they made this statement implicit.

God sat at the head of the next level, a kingdom of biological entities, and personally led a small cadre of administrators who directed the development of Earth. Do referenced the Hebrew Bible's pattern of utilizing different names for God to explain how the Chief of Chiefs and his (more precisely, "its," but Do inexplicably continued to use the male pronoun) lieutenants related to Earth. Using titles such as Elohim or Yahweh, Do explained, God directed ancient peoples including the Israelites in the most basic manner of how to overcome the human condition. The T.O.A. members insisted that God and other next level members "were physically there in Next Level vehicles, they had titles, and those titles then became names."³⁶

Though Do spent comparatively little time discussing God the Father, the topic of Christ dominated conversations during several of the twelve "Beyond Human" sessions and many of the later posters, often because Total Overcomers Anonymous's leader compared his own mission, as he understood it, to that of Christ. When Do spoke of Jesus, he repeated the same claim that he and Ti had made during the days of Human Individual Metamorphosis: both before and after Christ's incarnation he possessed a physical body in the next level, and during the incarnation itself he possessed a physical body on Earth. Such a position, of course, does not differ from that of many Christians, though the question of whether Christ possessed a physical body before the incarnation has divided theologians for millennia. Do considered the topic directly. "Did not Jesus take a human vehicle (body)? If He had pre-existence, had He never had a vehicle before He took that human vehicle? Of course, He had had a vehicle before He took that human vehicle. Was He not a member with a Next Level vehicle in our Father's Kingdom before He took that human vehicle?"³⁷ A poster put this another way, "[t]wo thousand

years ago, an Older Member in the real Kingdom of Heaven, left behind His Next Level (non-mammalian) body and incarnated into a ‘picked’ and ‘prepped’ human body at approx. its 29th year.”³⁸ T.O.A. taught that Christ, like God the Father and the other next level beings, was a fundamentally physical, biological creature, a next level alien who took a temporary body on Earth before returning to his own in the heavens.

Just as did the '88 *Update*, “Beyond Human” deemphasized the role of Christ’s bodily metamorphosis, what had been a staple of Ti and Do’s message during the mid-1970s when they were still only the Two. The interpretation introduced in the '88 *Update* represented a denaturalizing or “re-supernaturalizing” of the movement’s view of Christ. The video series both amplified the particular view of the update but also engaged in a simultaneous materialistic rereading by limiting the role and value of the ultimate supernatural element in the Christ-story, the resurrection itself. Here Do thoroughly naturalized Jesus, and like the Deists two centuries earlier, treated Christ as a teacher and holy man, but denigrated both the view of him as God as well as the possibility of the miracle of resurrection. That is, while Do and T.O.A. simultaneously downplayed the naturalistic and materialistic elements that the Two had first mentioned (the Resurrection and to a lesser extent the Transfiguration), they emphasized the naturalistic and physicalist nature of Jesus himself.

Qualifying his critique by claiming that he could not know if the resurrection represented a bona fide miracle, a staged event, or a later invention, Do attacked a supernatarnalist reading of Jesus’ resurrection as unnecessary for the understanding on Christ’s message. “I heard a pretty prominent television minister not long ago say if Jesus did not resurrect, literally, physically, actually *resurrect* from an honest-to-

goodness *dead* state from in the tomb, after having been on the cross, if that *miracle* of resurrection from the dead did not occur, then *everything* in Christianity is a farce. That appalls me. I can't identify with that kind of thinking at all."³⁹ The resurrection, Do added, didn't matter "a hill of beans," since the words and message of Christ mattered far more than any demonstration that Jesus might have performed. Here "Beyond Human" materialized and naturalized the story of Christ while simultaneously implying an almost-scientific open-mindedness. It did not matter, Do indicated, whether one accepted the resurrection or not, what mattered was what one learned from it. In keeping with this position, the advertisements and posters did not mention the resurrection.⁴⁰

Do held a particular vehemence against Trinitarianism, perhaps because of the obvious complications that it would introduce to the idea of a God the Father and Christ as two completely separate physical biological beings. Hammering against such a position, Do lamented, "[w]ell, you know for those preachers, evangelists, and religious leaders who say that Jesus is God, it's ridiculous. I hate to say that, but it's ridiculous. A *member* of the Kingdom of God? Absolutely! That soul was a member of the Kingdom of God. But to use the term 'God' [which] references as another term for the Top Man, the Creator of Creators, the very One who is the King at the top of that Kingdom Level[,] is not accurate."⁴¹ Rejecting the tradition view of the Trinity, Do redefined it as a psychological condition wherein a representative of the Kingdom of Heaven served as a Father to other members of the next level, or to human beings, while simultaneously behaving as a Son to his superiors. (Do didn't mentioning the Spirit, which might have represented either an unintentional slip or an intentional avoidance of the topic.) This psychological approach to the Trinity loosed it of any supernatural elements and

apparently made it more palatable for Do and his follower's materialistic view of Christ, God, and the next level.⁴²

If God and Christ occupied the zenith of the next level biological ecosystem, then Lucifer and his servants represented the nadir. In several very early sources Ti and Do, then using the names Bo and Peep, defended the reality of Lucifer and stated that he also possessed a physical body. Yet few of H.I.M.'s early materials mentioned Satan, nor did they discuss his nature beyond a general agreement that he also existed in a natural material state. The "Beyond Human" video series and satellite broadcasts expanded on the nature of Lucifer and provided a detailed background on him. Several of the advertisements and posters even fixated on the figure of Lucifer, providing extended details on his goals and methods. Throughout, T.O.A. portrayed Satan as a purely physical tangible creature, a malevolent extraterrestrial out to control the human level of existence.

The "Beyond Human" series as well as the "'UFO Cult' Resurfaces with Final Offer" advertisement each provided summaries of Lucifer's origins. Most commonly referring to their vision of Satan as "Lucifer" or sometimes as "Luci," Do explained that Satan and his minions also inhabited the physical heavens, but not the same location as the next level beings.

"Luciferians," he explained, were what "humans call space aliens."⁴³ During the second session of the satellite series, he explained their origins:

Okay, here's this corporation that belonged to our Father's Kingdom and it was the only corporation at a given time. And then this member says, 'I don't like this limiting, this restricting position that I'm in, because my Older Member...I don't think He's that smart. He holds me back. I could really be moving forward.' And so he goes out here and forms another corporation. ... And He [the Father] says, 'I can't let you go on with your behavior and your thinking, and your

renegade attitude, and your letting this ego come back in where you want to ‘be somebody.’ I can’t let you come back into this place. I’m going to confine you to outside of this camp.’”⁴⁴

Do’s retelling of the expulsion story, which follows the general contours of the traditional Christian view of Satan’s rebellion, emphasized the physical nature of Lucifer’s fall. Lucifer belonged to a “corporation,” but left to form another corporation, after which God expelled him from “this place” and “this camp.” All of these terms hint at the very physical manner in which Do and other members of T.O.A. understood Lucifer’s fall from grace.

During the third session, Do would retell the same story, but specifically add that Satan also possessed a physical forms, something only implicit in the first telling. He also explained how Lucifer and his host managed physical travel, the nature of their biology, and their technological mastery:

when Satan was booted out of the Household of our Father’s Corporation, he had a “heavenly body” in the making. According to the record, he took a third of the heavens with him, must have been a bunch of people, and they had “heavenly bodies” in the making. They also had a lot of technical, advanced information, beyond human technology. They knew how to get from here to there in different means, certainly, than humans in this Age would know. Some knew how to appear and disappear. They had a body that had all kinds of capacity that human flesh on this planet, in this Age, do not have. Don’t be confused, they are not “Heavenly bodies.” Heaven is where our Father is. They were cast out of where our Father is. The moment they were cast out, they no longer had Heavenly bodies, they had what was left of a partially completed heavenly body—a hybrid similar to what would happen if a caterpillar were removed from the chrysalis before it became a butterfly.”⁴⁵

This passage invoked a theme that the Two had mentioned in some of their earliest materials, the idea that next level aliens (or Luciferian extraterrestrials, in this case) had physical abilities to appear and disappear. In “Beyond Human” Do explained this capability as a capacity of the bodies of Lucifer and his followers, perhaps one linked to

the “technical, advanced information” that the renegades took with them from the next level. The *USA Today* advertisement, “‘UFO Cult’ Resurfaces with Final Offer,” repeated the basic outline that Do offered in “Beyond Human,” summarizing the Lucifer’s rebellion as a “falling away.” Repeating another claim from the videos and satellite broadcasts, the advertisement noted that humans refer to the “Luciferians” as “space alien races.” Though in a somewhat shorter form, it reiterated the same approach.⁴⁶

Unlike the earlier H.I.M. materials, which envisioned “disincarnate spirits” as humanity’s enemies, the Total Overcomers Anonymous materials explicitly declared Lucifer and the Luciferians “humans’ GREATEST ENEMY,” to quote the *USA Today* advertisement. While many Christians, Muslims, and some Jews might agree that Satan represents humanity’s greatest enemy, few would accuse Lucifer and his minions of the litany of physical, materialistic crimes that Do and his followers lay at the feet of the Satanic forces. During the third session of “Beyond Human,” T.O.A.’s leader declared that the Luciferians periodically visited Earth, where they masqueraded as higher beings or Gods, contacted suggestible ufologists, and introduced false religious teachings designed to confuse human beings. Both the advertisement and later posters explained that the Luciferians employed holographic technology in order to mimic miracles and dupe people into physically serving them.⁴⁷ Even worse, they stole human bodies, performed artificial inseminations and deviant sexual practices on unwilling humans, and kidnapped individuals for “genetic experimentation.”⁴⁸ The poster produced March 21, 1993, “UFOs, Space Aliens, and Their Final Fight For Earth’s Spoils,” repeated this accusation of Luciferian’s physical tampering: “‘Luciferians’ abduct humans for genetic

experimentation, ‘rob’ healthy human specimens for their own next ‘suit of clothes,’ and induct humans into their service.”⁴⁹ Together with the materialistic understanding of Christ, God the Father, and the next level aliens, Total Overcomers Anonymous’s envisioning of the physical nature of Lucifer and the Luciferians completed the group’s process of offering physicalist analogs of the major theological figures within Christianity.

The Naturalization of Grace

The “Beyond Human” series and the subsequent advertising material introduced a new tenet of Total Overcomers Anonymous’s materialistic reading of religion: the concept of grace, and with it the linked notion of election. The idea of grace and election, neither of which appeared in earlier material that Ti and Do produced, represented a new phase in how T.O.A. understood the human soul. Though the ’88 *Update* had introduced a more supernatural reading of the process by which a human evolved into a next level being, the movement’s overall thrust continued to be a naturalistic one. A materialistic concept of grace, which Do introduced in “Beyond Human” and continued to develop until the Heaven’s Gate suicides, attempted to re-naturalize the group’s view of what they equated with salvation: the transformation into a perfected alien creature.

Do initially raised the issue of grace about halfway into the first session of the “Beyond Human” broadcast. Having detailed the nature of Christ and the content of the message that he brought—which matched that of Do himself, he taught—the T.O.A. leader abruptly switched topics.

A funny thing here is recorded in the Scripture and it confuses a lot of people, because you can’t really get into the Kingdom of Heaven, no matter what you do,

just on your own. It takes a *gift* from the Kingdom of Heaven to *even get you with their Representative*. It's almost as if the Kingdom of Heaven comes in and puts little, what do you call them? That they might put on an animal so that they can follow the animal, that a farmer might put... [Student interrupts: "Tags, beepers."] Yes, like a beeper or tag, or something that would enable the rancher or farmer to keep track of that animal and watch its development. In the same way, the Kingdom of Heaven can come in and observe the humans – can get a "readout" probably, and more likely, from their mode of transportation (from their spacecraft) can get this readout. And that readout says, "This one might have a good potential; this one still registers on my meter to have a lot of desire for goodness." And it might be pretty deep seated, it might be pretty hidden, and outwardly they may not appear to be religious or they may not have the obvious trappings or elements of recognition that would be seen as good. Humans can't judge that, but the Kingdom of Heaven can judge that. Then they give them a little "gift," and that little gift is almost like a little "chip" that's planted in their brain or in their body somehow.⁵⁰

Beginning with an allusion to "the Scripture," which in other circumstances for Do always meant the Bible, Do launched into an explanation for the material, physical nature of grace. Though much of H.I.M.'s earlier material insisted that anyone might join them, in this December 1991 video, Do taught that one cannot become a next level being through individual effort alone. Only a gift from the next level permitted a person to "get with" the next level's representative, that is to recognize Do's message as the truth and join his movement. In the language of religion, including that of the Presbyterian form of Christianity in which Do was raised and lived his early life, this gift is grace, an undeserved gift of blessing bestowed upon a person.

For Do and the other members of T.O.A., grace existed, but not in any ethereal or symbolic sense. Grace took a physical, material form. Calling it a little chip, or a beeper, or a tag, Do revealed in "Beyond Human" that the next level used its gift of grace to track individuals who may possess "good potential." Like Ti and Do's much earlier effort to create a technological view of dispensationalism wherein the elect rose into the heavens aboard UFOs, here Do offered a technological view of grace. In their spacecraft, next

level aliens used readouts to keep track of human beings who had received an implanted tracking device, which served the dual purpose of allowing the next level to follow individuals through their life as well as permit them the ability to recognize next level information when they encountered it. In several of the posters and advertisements that followed the “Beyond Human” broadcasts, Total Overcomers Anonymous called this a “chip” or “deposit of recognition.”⁵¹ By the final days of Heaven’s Gate, the movement even made explicit what Do only implied in the 1991 video: those without chips lacked the ability to recognize the next level teaching, and therefore could never hope to evolve beyond their human condition.⁵²

Do mentioned the implanted deposit in several other of the “Beyond Human” broadcasts, but returned to the topic most extensively in the waning moments of the seventh session.⁵³ Having finished a discussion of next level bodies, notably their indestructible nature, Do concluded with an insistence that complimented his earlier predestinarian message that only a select few people, those with gifts or tags, might recognize the truth of his message. Here Do introduced the concept of the elect. Only those with tags, he insisted, had the opportunity to join T.O.A. “You can be in the same mindset that we’re in – that we anticipate entering our Father’s Kingdom soon. We feel that what has been shared with us can shorten the days of the elect. If you have come here from our Father’s Kingdom to finish your overcoming, then you know what we’re saying is true, and you’ll be waiting and craving to go full throttle in finishing that off.”⁵⁴ “The days of the elect” to which Do alluded represented a New Testament verse (Mark 13:20) that he elsewhere explained as meaning the waning days before the final judgment, when the elect souls would return to the next level.⁵⁵

Though he did not explain in the “Beyond Human” video what he meant by the shortening of the days, he did use the phrasing to consider the concept of “the elect,” one that he linked to his understanding of deposits and the material nature of grace. Do explained the concept of election as the state of having received the grace of the next level, or the “ingredient” as he called it, that the next level granted a person. “The ‘elect’ would mean that you have been picked to finish your overcoming. You could say, ‘Oh boy, I placed such a ‘high falootin’ interpretation of what the elect is, how could I be one of the elect’? Well, if the Next Level picks you, don’t question it. ... They’ve given it to us. They’ve fed it to us. If they hadn’t fed it to us a step at a time, we couldn’t have done anything. They did it. They gave us the ingredients, by our asking and by their choice of giving, so that we could be recipients of overcoming.”⁵⁶ Election depended on grace, which in turn depending on a physical, material marker that the next level bestowed onto a person.

In these passages, Do recast a particular form of Protestant thought into materialistic and naturalistic terms: Reformed theology, known popularly as Calvinism, the root tradition from which Marshall Herff Applewhite’s birth tradition of Presbyterianism originated. Though the Presbyterian Church US (PCUS), the denomination to which Applewhite and his minister father had belonged, had abandoned much of the strict Calvinism from the days of Jonathan Edwards, Do the former Presbyterian seminarian fluently utilized the appropriate theological terminology.⁵⁷ It is impossible to determine why Do integrated Reformed theology into T.O.A. Perhaps the theological precursors to his birth-tradition subconsciously inspired him, or perhaps he used the concept of the elect in order to make members of the movement feel special.

However, Do clearly incorporated a materialistic reading of Reformed theology, positions that he certainly had earlier encountered as the son of a Presbyterian minister and then as a Presbyterian seminarian himself.⁵⁸

The naturalized conceptualization of grace and election afforded Do and Total Overcomers Anonymous an opportunity to offer a materialistic explanation of one of the more vexing spiritual issues: the nature of the soul. Human Individual Metamorphosis made no mention of souls, and though it did envision the reality of unseen spirits, seemed to root the concept of identity or selfhood in the body, since it promised a bodily metamorphosis into a permanent next level alien as its form of salvation. The '88 *Update* reversed that position, declaring that the soul or consciousness could transfer between bodies or “vehicles” as it evolved upward or traveled between the next level and the Earthly kingdom. Following the “Beyond Human” video series, Total Overcomers Anonymous and then Heaven’s Gate began to link the idea of the soul to the concept of the chip or deposit that the next level implanted into a person. A January 1994 poster used to advertise T.O.A. meetings in either Texas or California concluded with the declaration, “[t]here are souls – some of you, here now – who have received a *deposit of recognition*, and that knowledge finds you desirous of connecting and bonding with the Next Level. Those who have that deposit of *Life* will *believe* what we say, and *know* who we are.”⁵⁹ This poster linked the concept of *life* with that of the *deposit*, stressing both concepts, and implying that those without the deposit might lack the possibility of true life. By the final days of the movement, Do explicitly equated the deposit with the soul. A deposits contains a “soul’s beginnings,” he explained in the introduction to the *Heaven’s Gate* anthology that he and followers published shortly before the suicides.⁶⁰

Similarly, he bluntly declared in a 1995 statement posted on the internet that “[h]umans in any given time seem to fall in one of three categories: i) Humans without deposits – those who are simply ‘plants’ ... ii) those with deposits/souls who are receiving nourishment from the present Rep(s) toward metamorphic completion, and iii) those with deposits/souls who are not in a classroom nor in a direct relationship with the Representative(s) from the Level Beyond Human.”⁶¹ Though this approach denied some individuals the possibility of having a soul—the vast majority, Do explained—it allowed the movement to explain the nature of the soul on a natural level.⁶² Heaven’s Gate managed to reduce one of the most blazingly supernatural of concepts, the soul, to a materialistic and natural explanation.

Science, Religion, and Faith

For the first time in the history of the group that became Heaven’s Gate, the “Beyond Human” series included a specific discussion of science and its relation to religion, rather than merely evidence of the absorption of scientific approaches into religion. In the video series, Do attempted to both seize the mantle of science as well as limit what he considered the main scientific critique of religion, namely that the latter relies upon faith. Though Do continued to insist that his own movement represented a naturalistic materialistic way of looking at the world, he rejected the pure empiricism that he believed science recommends, doing so in a way strikingly similar to that of ISKCON’s A.C. Bhaktivedanta Swami. Like the Hare Krishna leader, Do lamented that scientists claimed to know the truth but have historically changed their minds about major theories. Do specifically mentioned astronomy as an example. “Scientists

frequently in this human world say, ‘I will believe what I see. I have to see it to believe it. I can’t accept this religious concept of believing something on faith or just because it’s some legendary concept or religious concept. I believe what I see.’ And yet, how many times have the astronomers rewritten their history books because they thought they had seen things that meant so and so were the facts and only to later find out that what they had seen didn’t mean that, it meant something else. And then later to only understand that even that was off, and have to continually rewrite their books, even though they are the ones that say, ‘I believe what I see.’ You don’t know what you see when you see it. We can all misjudge what we see,” declared Do during the seventh “Beyond Human” session.⁶³ Unlike Bhaktivedanta, who rejected the notion of accurate senses, Do doubted empiricism because he doubted people could accurately process what they saw. The difference between Do and Bhaktivedanta derived from the Heaven’s Gate’s leader’s materialistic naturalism, a position that ISKCON explicitly rejected. Do believed that the world and the heavens could be accurately observed, but doubted that observation provided enough data to allow a cogent theory. He insisted that science’s empiricism lacked the crucial ability to accept data on faith, knowledge that the next level provided directly through its representatives.

In other words, despite Do and Total Overcomers Anonymous’s avowal of naturalism, they could not accept the inductive approach to knowledge that scientific empiricism claimed. They valued the deductions of belief over empirical demonstrations of truth. For that reason, Do moved in “Beyond Human” from the question of empiricism to the notion of faith. Faith, he defined, “is evidence of things unseen,” and the faith that he and his movement put in the next level overwhelmed any sort of counter

evidence.⁶⁴ “[A] good example of that,” he added, “would be: as we are fed information concerning the workings of the Kingdom of Heaven and the workings of overcoming, the more that picture grows and grows and grows, and begins to just amaze us and astound us, because these intricate pieces of the puzzle begin to fit together in that picture, and soon that picture is so magnificent, so beyond anything we could have dreamed of, that it is evidence of things unseen. Therefore, it is proof to us. ... I guess what I’m saying is that we seem to know more about the reality of something we haven’t seen than someone who has seen it. So, the basis of faith works.”⁶⁵ Heaven’s Gate, like many other religions, looked to deduction, direct revelation, and religious authority to determine truth, rather than the empirical process of gathering data in order to construct a hypothesis. While accepting the foundation of science—materialistic naturalism—Heaven’s Gate maintained its reliance of the methods of religion rather than those of science. Empiricism could not replace scripture and the teachings of the movement’s leader.

Philosopher of science Tom Sorell has defined scientism as “the belief that science, especially natural science, is much the most valuable part of human learning – much the most valuable because it is much the most authoritative, or serious, or beneficial.”⁶⁶ Though Heaven’s Gate naturalized its religious ideology, it was not a form of scientism. In “Beyond Human,” Do made clear that science and scientific approaches did not provide “the most valuable” way of understanding the world. Do linked science to empiricism and the denial of faith, two epistemological approaches that he and other members of the group clearly rejected. Though they clearly valued science and scientific language—for example talking of the mind as a computer and their communication with

the next level as type of radio signal exchange—Do and the other members of Heaven’s Gate insisted that the next level could communicate directly with them, bypassing the normal senses and thereby disqualifying pure empiricism as the best approach to understanding the world and heavens.⁶⁷ In other words, if science conflicted with its own ideology, Do indicated in “Beyond Human,” T.O.A. could dismiss it.

Despite his caution towards science, Do reserved his harshest words for religion, and in fact the satellite and video series and the subsequent advertisements spent far more time and space criticizing religion than they did science. “I don’t want to start condemning religions,” Do declared during the fourth “Beyond Human” session, “but, you know, there’s something we have to return to here, and that is that our Father’s Truth is not a religion. It’s simply the facts. Simply the way it is – it’s the facts. Once we even begin to label it ‘religion’ we are already, at that point, a significant degree away from the facts, the Truth.”⁶⁸ Do might not have wanted to condemn religions, but that is precisely what he did, condemning religion as a category as well as individual religions. All the while, however, he continued to admit that Total Overcomers Anonymous itself was a religion.

Religious language, Do declared several times during the video series, was less objective, less true, and less accurate than other language.⁶⁹ Though he did not provide an explanation for why religious language possessed such attributes, he did remark on how religion naturally “tainted” the truth due to “the passage of time and because of the lack of closeness of the Next Level.”⁷⁰ Religion itself, rather than any particular form of religion, seemed to bear the blame for this tainting. The *USA Today* advertisement declared that “[y]ou cannot *preserve* the Truth in your religions. It is with you only as

long as a *Truth bearer* is with you.”⁷¹ Several of the posters made similar claims.⁷² Some of Do’s vehemence might originate in his position as the founder and leader and an alternative religious movement in competition with other religions. Certainly that would explain his opposition to his competitors. Indeed Do did challenge particular religions, primarily Christianity, Judaism, and the New Age, on several occasions. However Do, and later several members of the Heaven’s Gate movement, explicitly attacked religion as a category and form of knowledge.

In one of the most explicitly anti-religious sections of “Beyond Human,” Do explained that his group’s criticism of religion originated in their view of religion as possessing fantastical, illusionary views of the world and heavens. This revelation occurred during an exchange with one of his students in the closing minutes of the final of the “Beyond Human” session:

Student: How do these items [i.e. Do’s teachings] relate to overcoming: religion?

Do: Well, why don’t you give me the definition of religion as what the dictionary would say religion is?

Student: “Belief in and reverence for a supernatural power accepted as the Creator and Governor of the Universe.”

Do: Well, because of what so-called religions are, at times we feel like we don’t want to associate with that term because we want to say the Truth that we have is real. It’s not a religion because religions have become fantasy and illusion, and they have adjusted all their thinking so that they don’t have to do anything about changing.⁷³

Religion itself is something that must be overcome, Do answers. T.O.A.’s leader believed that he represented the truth, which was real, whereas religions represented fantasy and illusion. Part of this view derived from his disagreement with other religion’s theological positions, that they “don’t have to do anything about changing” and overcoming the human condition, but it is also much broader. As he declared in the opening minutes of the third session of “Beyond Human,” Heaven’s Gate offered “the

Truth, which comes from the Creator, the Kingdom of Heaven. Now, this is not truth in a philosophical sense, not truth in a religious sense, it's Truth in *truth* sense, as far as what really *is* – the accurate information, as far as you can understand.”⁷⁴ Like his rejection of pure scientific empiricism, Do linked his criticism on religion to his belief that the next level provided direct, accurate information directly to him and his movement. While Do clearly indicated his rejection of the category of religion in “Beyond Human,” he did not provide a clear explanation for it.

Do's students, however, did. Shortly before the March 1997 suicides that ended Heaven's Gate, its leader and members collected the various materials they had produced over the years into an anthologized collection, which they titled *How and When “Heaven's Gate” (The Door to the Physical Kingdom Level Above Human) May Be Entered*, published electronically before the suicides and printed posthumously. (I have abbreviated this text as ‘HGA,’ or Heaven's Gate Anthology.) The book represented the group's final attempt to communicate its teachings with outsiders, and for the first time included a series of short theological treatments written by members of the group other than its leaders. Using their religious names within the group, all of which ended with the suffix “ody,” individuals such as Anlody, Jwnody, Qstody, and Stmody offered twenty-three assessments of their movement's religious positions. Several themes predominated in these “Statements by Students,” as the HGA called them. Nearly all of the authors stressed the physical nature of the next level and the physical biological disposition of next level aliens. Most of the adherents of Heaven's Gate mentioned the notion of tags or deposits, explaining them as the physical form that a soul takes. Many denigrated specific religions and religion generally. Several different voices emerged

from the twenty-three individual statements that nevertheless agreed on one basic concept: Heaven's Gate offered a naturalistic, materialistic message of how a person could enter the physical heavens, whereas other religions, or perhaps religion more broadly, did not. Although many of these views repeated what Do had earlier discussed in "Beyond Human" or the '88 *Update*, the students also offered their own explanations of Heaven's Gate ideology. The HGA anthology not only offered the theological positions of the members of the movement, but as one of the final sources that the group produced, it provided the last word on Heaven's Gate's religious understandings.

Of the themes that the Heaven's Gate members repeated most frequently, they commented on the physical nature of heaven and of the next level entities who lived there, as well as the physical makeup of Satan and the Luciferian space aliens. Here they repeated but amplified a concept that the Two stressed even before they became Bo and Peep, much less Ti and Do. Many of the group's members wrote what easily might have been the words of their leaders two decades earlier, for example the Heaven's Gate member calling herself Jnnody, a woman who had first met the Two in Waldport, Oregon in 1975, and joined the movement shortly thereafter. Jnnody wrote that the "'Kingdom of God,' the 'Evolutionary Level Above Human,' the 'Next Level,' and the 'Kingdom of Heaven' are all synonymous terms for the same advanced level of existence above the human kingdom. This Next Level – the Kingdom of God – is a many-membered Kingdom, a physical level of existence in deepest space (outside of man's concept of time) *beyond* this human level – advanced physically, technologically, behaviorally, ethically, genetically, and in the wisdom and knowledge of service in the Creator's world."⁷⁵ Jnnody's coreligionist Smmody, another long-time member who joined in

1976, similarly declared that “[t]he TRUE Kingdom of God (the Next Level) is a REAL place – a reachable place.”⁷⁶ Even the name of the anthology itself, which declared open the door to the “Physical Kingdom Level Above Human” repeated this central claim that the next level was a physical, material, tangible place. Other adherents of the group that contributed to the volume offered explanations of the biological nature of the next level aliens and their opposites, the Luciferian extraterrestrials. None of treatments differed from that of Do in “Beyond Human” and previous sources.⁷⁷

Several of the Heaven’s Gate members contrasted their physicalist approach with the spiritual or supernaturalist perspective of other religions, or of religion more broadly. Many linked the theme of the material nature of the heavens with their dismissal of religion. A member writing under the name Chkody lamented that “[w]ith all the misinformation about the Next Level put out by religions, it is not surprising that individuals have a hard time grasping that the Next Level exists in the literal Heavens and is more physical and more real than the human world.”⁷⁸ Chkody considered this concept so important that the HGA printed the entire sentence in boldface. Religion, Chkody explained, confused people because it denied the physical nature of the heavens, or in Do’s words from around the same period, offered “clouds and harps” instead of the reality of physical biological bodies.⁷⁹

Chkody, whose birth name and life circumstances remain unknown, offered several additional criticisms of religion in her contribution to the HGA, “The Hidden Facts of Ti and Do.” Opening with a dismissal of “antiquated religion” and “New Age spiritualism,” she rejected the religions as offering only “misinformation.”⁸⁰ Religions failed, Chkody explained, because they reduced the truth to belief systems and rituals,

rather than accepting the pure truth that the next level periodically provided the Earth. Chkody's criticism occupied an unstable region between rejecting religion generally and all of the world's religions specifically. On the one hand, she stated that the malevolent Luciferian space aliens had influenced all known religions and infused them with misinformation meant to control the hapless human inhabitants of the planet, which although uncharitable to religions, spared the category of religion itself. On the other hand, Chkody declared, emphasizing the point in boldface, that “[o]nce a movement becomes a religion, it's already lost the practical ‘truth’ it had to offer. It's plain facts – that is what truth is. Once it is even *called* a religion, it is corrupted.”⁸¹ Such a blanket dismissal of religion implied a rejection of the entire class “religion” as irredeemable. Although unclear on whether she meant to reject religion generally or merely all religions, Chkody did clarify the underlying problem with religion: it included “a belief system with token rituals of homage and very little self-discipline.”⁸² What Chkody wanted was *the truth*, not beliefs or rituals. She wanted the method of overcoming her humanity, not rites of adoration.

Other members of Heaven's Gate presented differing objections to religion. Jwnody, another long-time member who had joined the movement in 1975 and contributed several statements to the Heaven's Gate anthology, tailored one of her pieces as an all-out assault on religion, “Religions are Humans' #1 Killers of Souls.” Jwnody laid out several positions in this statement, but most centrally she argued that Luciferian agents used religion to control humanity. “Sadly,” Jwnody wrote, “it has become quite evident that *all* of Earth's religions are a product of extensive psychological manipulation and tampering by these space-alien races.”⁸³ In addition to this explicit point against “*all*

of Earth's religions," Jwnody also implied a distrust of the category of religion itself. In fact, she used "religious" as a synonym for "false", indicating an underlying rejection of the concept of religion as well as each of the specific religions. Combining a restatement of one of Heaven's Gate's fundamental positions with a rejection of religion, Jwnody wrote that "[t]he Kingdom of Heaven is not an etheric or spiritual place, but a many-membered physical Kingdom that exists in deep space ... [And] the one who was Jesus was a member of this Kingdom who was sent to take you out of your ignorance – a man from the only real, potential future, not some religious, mythical icon."⁸⁴ These two sentences paralleled the concepts of real and physical, contrasting them with those of religious, spiritual, and "etheric" (by which she probably meant "ethereal"). In making this parallel, she implied that "the religious" opposed "the real." Her compatriot the nearly identically-named Innody repeated this position nearly verbatim, "Jesus was not a religious man. He was a man from the only real potential future – in another world, an evolutionarily advanced level of existence – the Next Level."⁸⁵ Jwnody and Innody made a very clear connotation: others believed in a *religious* or *mythical* Christ, whereas they followed a *real* Christ. Both indicated through their rhetoric an opposition between religion and reality, the religious and the real.

Jwnody and Innody's statements, and others like them from their fellow adherents of Heaven's Gate, indicated the overall view of religion within the movement. Religion, they believed, equaled false knowledge. This explains Anlody's odd declaration in her statement that their "message is not now, nor has it ever been, religious or spiritual."⁸⁶ Anlody, whose membership dated to 1976, went on to discuss God, heaven, the soul, and Lucifer in her brief statement "Investments," despite her explicit denial of any religious

element to her message. On her movement's apocalyptic expectations of the oncoming "end of the age," she flatly declared "[w]e've been saying the planet was due to be recycled at the end of the age. That is not religious beliefs."⁸⁷ The naturalistic language—"recycling" to mean the apocalypse, for example—provided out way for Anlody and her compatriots to deny the religious nature of their message, though she did use religious language in bluntly criticized those who "stop[ed] having a need for God or Heaven."⁸⁸ The members of the Heaven's Gate treated the concept of religion independent of the implicit religious nature of their own message. They could criticize the category while still using its notions.

One cannot easily rectify the uneasy relation between Heaven's Gate's dismissal of religion and the actual content of their religious system. The best explanation is that Heaven's Gate, while itself a religion, encapsulated an atheistic critique of religion, which they then deployed against the very category in which their movement belonged. Though certainly not a majority opinion, a large number of Americans agreed with Heaven's Gate that religion represented a false form of knowledge, mere sloppy thinking that transformed myths into absolute truths. Such a position found many proponents among both professional scientists and ufologists. Astronomer Carl Sagan, whose *Demon-Haunted World* thundered against both UFO sightings and miraculous healings, represented such a position, as did lesser-known atheist Frank Edwards, a well recognized ufologist within his own community whom Brenda Denzler quoted as denigrating religion as an "irrational and rigid belief system."⁸⁹ Heaven's Gate appropriated this view when it absorbed scientific naturalism within itself. Such a position emerged in the smug refutations of Heaven's Gate members Yrsody, who said

that religious people “walk righteously down a dead-end street,” and Qstody, who called the “distracted, self-satisfied slaves” of religion “programmed puppets worshipping false myths, rituals, futile belief systems and counterfeit fantasy gods.”⁹⁰ Without explanation, such depictions of religion existed alongside the author’s descriptions of what most would consider self-evidently religious topics.

Knocking on Heaven’s Gate

For over twenty years, Heaven’s Gate had adopted a materialistic, naturalistic ideological approach, recasting religious concepts in the language of science. Christianity’s major theological figures had become tangible biological entities, prayer and revelation became radio wave communication, and heaven itself a distant corporeal location in the sky. One concept, however, had troubled the movement since its origin: the notion of the self and the soul. Ti and Do, then merely the Two, accepted both an extremely materialistic reading of the self as the physical body as well as a conceptualization of the reincarnation of the soul and disincarnate spirits. After Nettles’ death in 1985, Do had moved to a less materialistic view of the soul that treated the body as merely a container or “vehicle.” The “Beyond Human” video series in 1992 added to that approach the idea of the deposit, the tag, a physical marker that Do at times equated to the soul. Some of the last materials produced by Heaven’s Gate—the statements by students and two final videos that Do produced—made explicit the equation of the soul and the deposit, providing a purely materialistic explanation for the soul. However, they also continued to accept the notion of the transmigration of the soul, and this belief made possible their decision to commit a mass suicide. The soul, though physical, could

transfer between one container and another. It possessed both physical and nonphysical elements, just as Heaven's Gate was both a religion and not one.

Nearly every one of the "Statements by Students" in the Heaven's Gate anthology included mention of deposits, and in each of these cases the authors described the deposits as the basis of the soul. Many took explicitly physicalist approaches to the soul, others used materialistic metaphors to explain soul but refrained for overtly declaring it a tangible object. Lvody, a member of whom nothing is known save his or her name within the group, wrote that the next level administrators "make a 'deposit' that contains a soul with a very small amount of Next Level information – it's like a tiny Next Level fetus. The program in that deposit contains a '*chip*' of recognition."⁹¹ Lvody identified this deposit, something like a tiny fetus or akin to a chip as the soul, but, but does not elaborate on its physical nature. Lvody's compatriot Drrody took the same approach, something between a metaphoric and materialistic treatment of the deposit. "A Next Level deposit is like a computer chip or a piece of hardware that functions in two ways," he wrote. "First, it acts as a homing device to guide one to the opportunity to connect with Teachers, or Representatives, sent from our Kingdom. ... Second, it provides a container for housing Next Level Mind or information."⁹² The deposit functioned like a computer chip, but it also contained information. Apart from describing the deposit's function, neither Lvody or Drrody commented on its true nature.

Others, such as Jwnody, who forcefully attacked religion in her "Religions are Humans' #1 Killers of Souls," used her "'Away Team' From Deep Space Surfaces Before Departure" to defend a explicitly naturalistic understanding of the deposit. Much of her statement used the vernacular of the *Star Trek* science fiction series to explain

Heaven's Gate's religious perspectives, and clearly she valued the scientific-sounding language of that television series. Calling Heaven's Gate an "away team," *Star Trek's* term for a group of crewmembers who leave their spaceship to visit a planet, she called the human condition a "gestation circumstance" that prepared individual souls for birth into the next level.⁹³ On the nature of the deposit she used just as naturalistic language. "The 'soul,'" she declared, "is a physical container residing within the body that can house living mind (or Next Level information), without which no life can be present."⁹⁴ Like Drrody, Jwnody envisioned the deposit as both soul and information storage vessel, but unlike her coreligionist, Jwnody declared the soul "a physical container."

Truly physical or not, Jwnody, Drrody, Lvvody, and all of their fellow members of Heaven's Gate simultaneously upheld the notion that the self could be transferred between bodies. Lvvody declared that "'I' – the identity – am the soul – containing Next Level mind, [and] this borrowed human body I am wearing is not me."⁹⁵ Wknody just as tellingly wrote that "[w]hen *we* speak of life, we are referring to the mind, and in our case, the soul, for that is what we identify as."⁹⁶ The denigration of the physical human body, despite an avowal of the physical nature of the soul, permitted the movement to entertain the possibility of committing suicide in order to free the self of its material confines, allowing it to transit into the heavens. The death of Ti a decade earlier reinforced for the group that the soul might journey to the next level without waiting for a UFO, and for reasons that scholars continue to debate, by 1996 Heaven's Gate considered actively encouraging the process. In all likelihood the movement's experience of wide-scale rejection by potential converts, the failing health of Do, apocalyptic pessimism towards the human world, and rumors in the UFO community of a flying saucer trailing

the Hale-Bopp comet combined to instigate the decision to perform a mass suicide, or “exit,” as the members themselves called it. The final source that Heaven’s Gate produced, a self-styled “Exit Press Release” posted onto their internet website, employed the same materialistic language that with which the movement began. “RANCHO SANTO FE, CA—By the time you receive this, we’ll be gone—several dozen of us. We came from the Level Above Human in distant space and we have now exited the bodies that we were wearing for our earthly task, to return to the world from whence we came—task completed. The distant space we refer to is what your religious literature would call the Kingdom of Heaven or the Kingdom of God.” The press release continued for several paragraphs, explaining the basic beliefs of the group. “The Kingdom of God, the Level Above Human, is a physical world, where they inhabit physical bodies,” it declared, mirroring the words of the Two’s first statement. The release concluded with a quote from the book of Revelation, “Blessed are the dead who die in the Lord.” (Rev 14:13)⁹⁷

Heaven’s Gate ended on the same note with which it began, the transformation of religious concepts and ideas into the language and terminology of materialism and naturalism. Death had become an “exit,” their suicides a “graduation,” the invitation to join them a “boarding pass” and the opening to heaven that they sought a “window.”⁹⁸ Though the movement never explained why it chose the name Heaven’s Gate for itself, the materialistic nature of the appellation provided a fitting closure on the movement that throughout its history attempted to absorb the materialistic, naturalistic underpinnings of science into religion.

¹ Thirty-nine members of Heaven's Gate died in the Rancho Santa Fe mansion. Two members of the group were not present and subsequently ritually ended their lives: Wayne Cooke (b. 1943) died May 6, 1997. Chuck Humphrey (b. 1943) died February 17, 1998.

² During the early 1990s, Heaven's Gate spelled Nettles' religious name "Te," but switched to "Ti" before the suicides.

³ Heaven's Gate, "Introduction to '88 Update," in HGA, sec. 3, 1. I have not been able to locate any print copies of the '88 *Update*, though surely several still exist. Fortunately, the group included the text of the booklet in their anthology, *How and When "Heaven's Gate" May Be Entered*. All citations refer to the reproduction of the source in that anthology. For more on the '88 *Update*, see Heaven's Gate, "Beyond Human—the Last Call, Session 1," in HGA, sec. 4, 5-15 (Originally Produced 1992), 15.

⁴ Heaven's Gate, "'88 Update," in HGA, 17.

⁵ The footnote referred to the movement's view of scripture and its relation to the next level, and read, "If any true religious scholars sincerely try to digest any of this strange puzzle, they may understand more of the real meaning of their studies." Ibid. in HGA, 11.

⁶ Ibid. in HGA, 17-19.

⁷ Ibid. in HGA, 4.

⁸ For more on doceticism and adoptionism, see Walter Bauer, *Orthodoxy and Heresy in Earliest Christianity*, trans. Robert Kraft (Philadelphia: Fortress, 1971), Bart D. Ehrman, *The Orthodox Corruption of Scripture: The Effect of Early Christological Controversies on the Text of the New Testament* (New York: Oxford University Press, 1993).

⁹ See, for example, the third statement's position that the next level is the "kingdom of God" to which followers of the H.I.M. system could graduate, or the Two's exhortation at the Waldport meeting that they taught a system for how to join "a level that you refer to as the Kingdom of God," which periodically accepts new members from Earth. Human Individual Metamorphosis, "Statement #3: The Only Significant Resurrection," 1, Muss, "'Grave Not Path to Heaven,' Disciples Told."

¹⁰ Heaven's Gate, "'88 Update," in HGA, 10.

¹¹ The classic account of direct encounter between a human being and extraterrestrial is Whitley Strieber's *Communion*, though see also Richard Hall's *Uninvited Guests*. Richard Hall, *Uninvited Guests: A Documentary History of UFO Sightings, Alien Encounters, & Coverups* (Santa Fe, N.M.: Aurora Press, 1988), Whitney Strieber, *Communion: A True Story* (New York: Beach Tree Books, 1987). Many ufologists who discuss crashed alien bodies combine this view with "exposés" of alleged government cover-ups. For a good example of this, see Lawrence Fawcett and Barry J. Greenwood,

Clear Intent: The Government Coverup of the UFO Experience (Englewood Cliffs, N.J.: Prentice-Hall, 1984).

¹² Heaven's Gate, "'88 Update," in HGA, 15.

¹³ Ibid. in HGA, 12.

¹⁴ There are additional examples of how the '88 *Update* extended the materialistic and naturalistic approach of H.I.M. to new material. Continuing a theme from the Two's earliest materials, the booklet explained that "so-called flying saucers, or misappropriately labeled UFO's, were means of transportation and laboratories of the Kingdom of Heaven (clouds of light, wheels of fire), and that the occupants of these spacecrafts were for the most part members of the true Heavenly Kingdom [alongside humans serving as zoological specimens]." Ibid. in HGA, 4.

¹⁵ Ibid. in HGA, 8.

¹⁶ Leon Festinger, Henry W. Riecken, and Stanley Schachter, *When Prophecy Fails* (Minneapolis: University of Minnesota Press, 1956), 27.

¹⁷ Ibid. For an examination of Festinger's main points as well as an analysis of his study, see the chapters by Stone, Zygmunt, and Melton in Jon R. Stone, ed., *Expecting Armageddon: Essential Readings in Failed Prophecy* (New York: Routledge, 2000).

¹⁸ Heaven's Gate, "'88 Update," in HGA, 9-10.

¹⁹ Ibid. in HGA, 10.

²⁰ See especially the 1992 video series, "Beyond Human," session 4.

²¹ Heaven's Gate, "'88 Update," in HGA, 12.

²² The significance of this shift from biological metamorphosis to spiritual transmigration cannot be overemphasized. In 1974, Ti and Do stated simply of the transit to the Next Level, "[y]ou do not have to die." Two years later they even more explicitly declared that the most important truth of their message was "[y]ou must take a *changed-over physical body with you into the next level*." That truth was of such value that in the seventy-four-page transcript of the interview in which the statement appears, it is the only italicized sentence. "Bo and Peep Interview with Brad Steiger, 7 January 1976," 89.

²³ On the group's limited attempt to communicate with outsiders, see Do's statement in "Beyond Human," that "we've been in a strange position, in that for 16 years we haven't shared this truth. Oh, we dabbled in it a teeny bit on two occasions, very sheepishly, and realized that no one wanted to hear about it." The two occasions to which Do referred were the '88 *Update* and an abortive outreach attempt two years earlier to form a "Anonymous Sexaholics Celibate Church," which failed to attract interest. Heaven's Gate, "Beyond Human—the Last Call, Session 1," in HGA, 15. See also Heaven's Gate,

“Anonymous Sexaholics Celibate Church Introduction and Ways,” <http://www.rkkody.com/rkk/rkkomat.htm#intro> (accessed 13 November, 1997 [Defunct]), Heaven’s Gate, “Anonymous Sexaholics Celibate Church Statement of Beliefs,” <http://www.rkkody.com/rkk/rkkomat.htm#belief> (accessed 13 November, 1997 [Defunct]).

²⁴ Heaven’s Gate provided a precise chronology of this period in their anthology, including newspapers and dates of their republication of the *USA Today* advertisement (July 21–September 25, 1993) as well as locations and dates of their meetings (November 1993–August 19, 1994). Heaven’s Gate, “List of Meetings by Date,” in HGA, sec. 6, 2, Heaven’s Gate, “Publications Where ’93 Statement Appeared,” in HGA, sec. 5, 7.

²⁵ Heaven’s Gate created a transcript of the “Beyond Human” broadcasts, which I have relied upon for all quotations and citations that I offer here. Though the actual videos are no longer available, several university libraries own digital copies of the series as distributed by the former Heaven’s Gate member named Rkkody. I have viewed several of the twelve sessions in their entirety and concluded that the transcription process was quite accurate. The transcripts omit Do’s interjections, occasional repetitions, and of course his vocal mannerisms but otherwise capture his words entirely accurately.

²⁶ Emphasis in the original. Heaven’s Gate, “Beyond Human Video Tape Jacket,” in HGA, sec. 4, 2 (Originally Produced 1992).

²⁷ Emphasis in the original. Note that I have followed the transcripts produced by Heaven’s Gate when providing direct quotes of the “Beyond Human” series. Having watched the series in its entirety, I am satisfied that the transcribers accurately captured the stress of their leader Do. Heaven’s Gate, “Beyond Human—the Last Call, Session 1,” in HGA, 1.

²⁸ Heaven’s Gate, “Beyond Human—the Last Call, Session 2,” in HGA, sec. 4, 16–26 (Originally Produced 1992), 25.

²⁹ Heaven’s Gate, ““UFO Cult” Resurfaces with Final Offer [USA Today Advertisement],” in HGA, sec. 5, 3 (Originally Produced 1993). Several advertising posters repeated this claim with subtle variations, for example the poster “The Only Way Out of This Corrupt World,” used for meetings in Denver and Albuquerque in November 1993, which declared that the speakers at Heaven’s Gate’s meeting would reveal “How the *true* Kingdom of God is a many-membered Kingdom – a *physical* Kingdom Level Above the human kingdom (with souls, minds, and bodies – not just ‘spirit’).” Heaven’s Gate, “The Only Way out of This Corrupt World [Poster],” in HGA, sec. 6, 3 (Originally Produced 1993). See also the poster used in January 1994 in either Anaheim or Dallas, Heaven’s Gate, “Crew from the Evolutionary Level above Human Offers—Last Chance to Advance Beyond Human [Short Poster],” in HGA, sec. 6, 5 (Originally Produced 1994). One of the final posters that Heaven’s Gate produced, used in July 1994 for their Boston-area meetings, also used nearly identical language: “How this Evolutionary Level Above Human is a many-membered Kingdom – a physical level of existence – above the

human kingdom (with souls, minds, and bodies – not just ‘spirit’). This Kingdom Level makes its ‘Headquarters’ in the most *distant* segment of the Heavens.” Heaven’s Gate, “Some Desire to Advance Even Beyond All Human Behavior [Poster],” in HGA, sec. 6, 10 (Originally Produced 1994).

³⁰ Heaven’s Gate, ““UFO Cult” Resurfaces with a Final Offer [Poster],” in HGA, sec. 6, 7 (Originally Produced 1994).

³¹ Heaven’s Gate, “Beyond Human—the Last Call, Session 3,” in HGA, sec. 4, 27-38 (Originally Produced 1992), 32.

³² Heaven’s Gate used this poster to advertise their final, August 19, 1994, meeting. The mention to the non-reptilian nature of next level aliens no doubt referred to one of the popular images of extraterrestrials as monstrous reptilian creatures. Several times in other sources, Do repeats the claim that next level creatures are neither reptilian nor mammalian. Heaven’s Gate, “The Shedding of Our Borrowed Human Bodies May Be Required [Poster],” in HGA, sec. 6, 11 (Originally Produced 1994).

³³ Heaven’s Gate, ““UFO Cult” Resurfaces with Final Offer [USA Today Advertisement],” in HGA. The advertisement’s mention of bodies as containers for souls indicated a continuation of a theme from the ’88 *Update*, namely the equation of the self with the soul or consciousness and a minimization of the value of the physical body. The “Beyond Human” series also repeated this view, one that developed out of need for a less naturalistic view of salvation following the bodily death of Ti.

³⁴ Heaven’s Gate, “UFOs, Space Aliens, and Their Final Fight for Earth’s Spoils [Poster],” in HGA, sec. 6, 8 (Originally Produced 1994). See also a very similar statement in Heaven’s Gate, ““UFO Cult” Resurfaces with a Final Offer [Poster],” in HGA.

³⁵ Heaven’s Gate, “Beyond Human—the Last Call, Session 2,” in HGA, 24.

³⁶ Heaven’s Gate, “Beyond Human—the Last Call, Session 12,” in HGA, sec. 4, 141-62 (Originally Produced 1992), 149. Compare also to Do’s treatment of the names of God during session 9 of “Beyond Human,” during which he explicitly mentioned the problem of translation. “Humans have a lot of misunderstandings about the term ‘God’ ... Oh well, it gets kind of confusing. And the term ‘God,’ the English term ‘God’—unfortunately in the translation from the manuscripts of the Bible there were different terms used. The English translators kind of lumped them all into one and used ‘God,’ no matter which Hebrew name was used. All these names *really meant* a member of the Kingdom of Heaven who was assigned a particular task ‘relating’ to the humans. ... [T]he *Creator* in the Kingdom of Heaven can assign some from His membership to assist Him in tending to the garden, certainly in elementary tasks or tasks that would be elementary to the Creator.” Emphasis in the original. Heaven’s Gate, “Beyond Human—the Last Call, Session 9,” in HGA, sec. 4, 97-108 (Originally Produced 1992), 98.

³⁷ Heaven's Gate, "Beyond Human—the Last Call, Session 12," in HGA, 141.

³⁸ Heaven's Gate, "He's Back, We're Back, Where Will You Stand? [Poster]," in HGA, sec. 6, 9 (Originally Produced 1994). Christian theology calls this position adoptionism, a view that the orthodox church rejected. See Ehrman, *The Orthodox Corruption of Scripture: The Effect of Early Christological Controversies on the Text of the New Testament*.

³⁹ Heaven's Gate, "Beyond Human—the Last Call, Session 5," in HGA, sec. 4, 50-61 (Originally Produced 1992), 55.

⁴⁰ Compare also to Do's statement during the fifth session that Christ's resurrection had almost no importance, what was a direct contradiction of the earliest statements that he and Ti (then Bo and Peep) made: "that illustration had relatively very little significance to His purpose here. His purpose was, as He told His disciples, 'Go teach about the Truth, give out the good news about the Kingdom of Heaven. It's at hand!'" Ibid. in HGA.

⁴¹ Heaven's Gate, "Beyond Human—the Last Call, Session 12," in HGA, 153.

⁴² Do covers the topic of the Trinity in Beyond Human, sessions four and five. During the fourth session he detailed the Father and Son using the words quoted. He briefly returns to the topic in the fifth session to equate the spirit and mind, though it is unclear in the fifth session if he is adding to his earlier conceptualization of the Trinity or offering another one.

⁴³ Heaven's Gate, "Beyond Human—the Last Call, Session 1," in HGA, 12.

⁴⁴ The first set of ellipses are in the original. Heaven's Gate, "Beyond Human—the Last Call, Session 2," in HGA, 25.

⁴⁵ Heaven's Gate, "Beyond Human—the Last Call, Session 3," in HGA, 33.

⁴⁶ Heaven's Gate, "'UFO Cult' Resurfaces with Final Offer [USA Today Advertisement]," in HGA.

⁴⁷ Heaven's Gate, "Crew from the Evolutionary Level above Human Offers—Last Chance to Advance Beyond Human [Extended Poster]," in HGA, sec. 6, 4 (Originally Produced 1994), Heaven's Gate, "'UFO Cult' Resurfaces with Final Offer [USA Today Advertisement]," in HGA.

⁴⁸ Heaven's Gate, "Beyond Human—the Last Call, Session 3," in HGA, 34.

⁴⁹ Heaven's Gate, "UFOs, Space Aliens, and Their Final Fight for Earth's Spoils [Poster]," in HGA.

⁵⁰ Heaven's Gate, "Beyond Human—the Last Call, Session 1," in HGA, 10. Compare also to Do's words during the third session that if a tagged person dies, then the next level

administrator “reads [it] out in His computer, and he looks on His meter and he says, ‘That soul’s worth saving. It just got kicked out of that vehicle in that accident on the freeway. It certainly isn’t just waste. It certainly still has some goodness in it. So, we’re going to put it aside over here, or we’re going to ‘put it on ice,’ so to speak, or we’re going to save it in some condition.’” Heaven’s Gate, “Beyond Human—the Last Call, Session 3,” in HGA, 31.

⁵¹ I refer to the posters, Heaven’s Gate, “Crew from the Evolutionary Level above Human Offers—Last Chance to Advance Beyond Human [Extended Poster],” in HGA, Heaven’s Gate, “He’s Back, We’re Back, Where Will You Stand? [Poster],” in HGA, Heaven’s Gate, “Some Desire to Advance Even Beyond All Human Behavior [Poster],” in HGA.

⁵² Do declared in January 1997, “The Kingdom of God sends crews to ‘tag’ or make ‘deposits’ in human bodies and their minds/spirits ... These deposits offer their recipients ‘recognition’ of the Representatives ... Without these ‘deposits’ no choice of becoming a student is within the will of a human.” Do’s further qualified that the Next Level only tagged potential members during certain eras, further limiting the availability of salvation. Heaven’s Gate, “Undercover “Jesus” Surfaces before Departure,” in HGA, sec. 1, 3-6, 5.

⁵³ For his other discussions, see Heaven’s Gate, “Beyond Human—the Last Call, Session 3,” in HGA, 28, Heaven’s Gate, “Beyond Human—the Last Call, Session 6,” in HGA, 63, Heaven’s Gate, “Beyond Human—the Last Call, Session 8,” in HGA, sec. 4, 85-96 (Originally Produced 1992), 85, Heaven’s Gate, “Beyond Human—the Last Call, Session 11,” in HGA, sec. 4, 121-40 (Originally Produced 1992), 121.

⁵⁴ Heaven’s Gate, “Beyond Human—the Last Call, Session 7,” in HGA, 83.

⁵⁵ Do quoted the verse in one of the final sources that Heaven’s Gate produced, its “Exit Press Release,” in which he paraphrased the King James translation, “And except that the Lord shorten those days, none shall be saved: but for the elect’s sake, whom He has chosen, He hath shortened the days.”

⁵⁶ Heaven’s Gate, “Beyond Human—the Last Call, Session 7,” in HGA, 83-4.

⁵⁷ Edwards was of course a Congregationalist, heir to the Puritans and precursor to today’s United Church of Christ. Presbyterianism shared the Reformed theology of Congregationalism but utilized a differing polity and church-governance tradition. Most forms of Presbyterianism had moved away from Calvinism by the mid-twentieth century. When Applewhite attended Union Theological Seminary, then affiliated with the Presbyterian Church of the United States (PCUS) denomination, many of his church’s leaders rejected the doctrines of election and predestination. The denomination’s 1942 amendment to the Westminster Confession of Faith implicitly rejected the notions. Declarations in 1958 and 1961 made this rejection explicit. For a discussion of the decline of the doctrines of election and predestination in the PCUS church, see Brian V. Hillis, *Can Two Walk Together Unless They Be Agreed?* (Brooklyn: Carlson Publishing,

1991), 10-13. Also note that Applewhite's PCUS is now part of the Presbyterian Church USA (PCUSA).

⁵⁸ One reason for my hesitance to assign any causality is that I am unsure what courses Applewhite might have taken during his two years at the Union Theological Seminary. The Seminary, in keeping with privacy laws, declined my request to release Applewhite's transcripts, and I have not been able to locate any additional information on his theological exposure while in attendance there.

⁵⁹ The dating of the poster makes it unclear if the group used it to advertise their meetings in Anaheim or Houston. Heaven's Gate, "Crew from the Evolutionary Level above Human Offers—Last Chance to Advance Beyond Human [Extended Poster]," in HGA.

⁶⁰ Marshall Herff Applewhite, "Do's Intro: Purpose—Belief," in HGA, sec. 0, iii-vi, iii.

⁶¹ Heaven's Gate, "'95 Statement by an E.T. Presently Incarnate," in HGA, sec. 1, 7-12, 9.

⁶² For more on Do's introduction of the concepts of grace and election, including how he dealt with the issue of predestination, see Zeller, "Scaling Heaven's Gate."

⁶³ Heaven's Gate, "Beyond Human—the Last Call, Session 7," in HGA, 77-8.

⁶⁴ Heaven's Gate, "Beyond Human—the Last Call, Session 8," in HGA, 78.

⁶⁵ Here Do repeats a classic proof for the existence of God, the teleological argument made famous by Paley's watchmaker analogy and repeated by Satsvarupa Damodara dasa in *The Scientific Basis of Krsna Consciousness*, produced by ISKCON two years after Applewhite met Nettles. Heaven's Gate, "Beyond Human—the Last Call, Session 7," in HGA, 78-9.

⁶⁶ Tom Sorell, *Scientism: Philosophy and the Infatuation with Science* (London: Routledge, 1991), 1.

⁶⁷ Heaven's Gate, "Beyond Human—the Last Call, Session 1," in HGA, 8, Heaven's Gate, "Beyond Human—the Last Call, Session 11," in HGA, 129. For more on the mind as computer, see Heaven's Gate, "Beyond Human—the Last Call, Session 12," in HGA, 156-7.

⁶⁸ Heaven's Gate, "Beyond Human—the Last Call, Session 4," in HGA, sec. 4, 39-49 (Originally Produced 1992), 48.

⁶⁹ See Heaven's Gate, "Beyond Human—the Last Call, Session 9," in HGA, 100, Heaven's Gate, "Beyond Human—the Last Call, Session 12," in HGA, 141.

⁷⁰ Heaven's Gate, "Beyond Human—the Last Call, Session 12," in HGA, 141.

⁷¹ Heaven's Gate, "'UFO Cult' Resurfaces with Final Offer [USA Today Advertisement]," in HGA.

⁷² For example consider the statement on one poster, "[y]ou cannot *preserve* the Truth in your religions. It is present only as long as a *Truth bearer* (Older Member from the *true* Kingdom of God) is present." Heaven's Gate, "Crew from the Evolutionary Level above Human Offers—Last Chance to Advance Beyond Human [Extended Poster]," in HGA.

⁷³ Heaven's Gate, "Beyond Human—the Last Call, Session 12," in HGA, 158. Compare with a similar statement several minutes earlier, when Do declared that "if instead of saying the 'Next Level,' we say the 'heavenly kingdom,' we get into religious terminology. We get into a degree of spirituality that is less than real, less than true. So, in an attempt to get to true, objective terminology, we use the 'Next Evolutionary Level' or the 'Evolutionary Level Above Human.'" Heaven's Gate, "Beyond Human—the Last Call, Session 12," in HGA, 141.

⁷⁴ Emphasis in the Original Heaven's Gate, "Beyond Human—the Last Call, Session 3," in HGA, 28.

⁷⁵ Jnnody, "Incarnating and Discarnating," in HGA, sec. A, 89-97 (Originally Produced 1996), 89.

⁷⁶ Smnody, "T.E.L.A.H. – the Evolutionary Level above Human," in HGA, sec. A, 22-23 (Originally Produced 1996), 22.

⁷⁷ For example, see Chkody's contribution to the volume, wherein she declared of the "'Space Aliens' or 'Luciferians'[:] Yes, they are real, and yes, they use what is termed as 'UFOs.'" Chkody, "The Hidden Facts of Ti and Do," in HGA, sec. A, 32-37 (Originally Produced 1996), 3.. Jwnody provides a representative view of the next level aliens, whom she refers to as "the most *advanced* species in the literal heavens, the Evolutionary Level Above Human[:] we represent the true, real, factual Kingdom of God. Jwnody, "Religions Are Humans' #1 Killers of Souls," in HGA, sec. A, 65-70 (Originally Produced 1996), 65.

⁷⁸ Chkody, "The Hidden Facts of Ti and Do," in HGA, 36.

⁷⁹ Heaven's Gate, "Planet About to Be Recycled—Your Only Chance to Survive—Leave with Us [Edited Transcript]."

⁸⁰ Chkody, "The Hidden Facts of Ti and Do," in HGA, 32-33.

⁸¹ Ibid. in HGA, 33.

⁸² Ibid. in HGA.

⁸³ Jwnody, "Religions Are Humans' #1 Killers of Souls," in HGA, 65.

⁸⁴ Ibid. in HGA, 66.

⁸⁵ Innody, “Incarnating and Discarnating,” in HGA, 96.

⁸⁶ Anlody, “Investments,” in HGA, sec. A, 98-100 (Originally Produced 1997), 98.

⁸⁷ Ibid. in HGA.

⁸⁸ Ibid. in HGA.

⁸⁹ Edwards as quoted in Denzler, *The Lure of the Edge: Scientific Passions, Religious Beliefs, and the Pursuit of UFOs*, 127.

⁹⁰ Qstody, “My Ode to Ti and Do! What This Class Has Meant to Me,” in HGA, sec. A, 30-31 (Originally Produced 1996), 30, Yrsody, “The Way Things Are,” in HGA, sec. A, 24-26 (Originally Produced 1996), 24. See also Lggody’s diatribe, “The World’s Most Successful Con Game,” which targeted Christianity explicitly, but religion more broadly. Lggody, “The World’s Most Successful Con Game,” in HGA, sec. A, 85-88 (Originally Produced 1996).

⁹¹ Lvbody, “Ingredients of a Deposit – Becoming a New Creature,” in HGA, sec. A, 8-14 (Originally Produced 1996), 9.

⁹² Drrody, “A Farewell Message to Those Who Remain Behind,” in HGA, sec. A, 27-29 (Originally Produced 1996), 27. Compare also to Snnody’s “Deposits,” in which the author wrote that “[t]hese seed-like deposits can also be compared to tiny computer chips programmed with a sort of ‘homing device’ to seek nourishment which can come only from a member of the Level Above Human who visits Earth and incarnates into a human body.” Snnody, “Deposits,” in HGA, sec. A, 80-84 (Originally Produced 1996), 81.

⁹³ Jwnody, ““Away Team” from Deep Space Surfaces before Departure,” in HGA, sec. A, 38-45 (Originally Produced 1996), 39.

⁹⁴ Ibid. in HGA.

⁹⁵ Lvbody, “Ingredients of a Deposit – Becoming a New Creature,” in HGA, 10.

⁹⁶ Wknody, “A Matter of Life or Death? You Decide,” in HGA, sec. A, 18-21 (Originally Produced 1996), 18.

⁹⁷ Heaven’s Gate, “Exit Press Release: Heaven’s Gate ‘Away Team’ Returns to Level above Human in Distant Space,” <http://www.heavensgate.com/pressrel.htm> (accessed 13 November, 1997 [Defunct]).

⁹⁸ Heaven’s Gate, “Heaven’s Gate - How and When It May Be Entered,” <http://www.heavensgate.com> (accessed 13 November, 1997 [Defunct]).

CONCLUSION

The year 1972 witnessed the Unification Church's first International Conference of the Unity of Science, the publication of Swami Bhaktivedanta's *Easy Journey to Other Planets*, and the birth of Heaven's Gate. Also in 1972, Sydney Ahlstrom published his magisterial *Religious History of the American People*. Ahlstrom's text has shaped the study of American religious history and, as Catherine Albanese has noted, no subsequent book has attempted to treat American religious history with the same "sweep and narrative scope."¹ Ahlstrom's text is a classic. Yet in the book's over one-thousand pages, Sydney Ahlstrom discusses science only twice, once when he considers New Thought, and again in his treatment of the fundamentalist-modernist controversy. The time has come to focus more attention on how individuals and groups throughout American religious history have related to science. We must include new religious movements alongside old religious movements in that history.

The Unification Church, the Hare Krishnas, and Heaven's Gate adopted three different perspectives on the meaning, nature, and role of science, and its relation to religion. The first of these movements to arrive in the United States, the Holy Spirit Association for the Unification of World Christianity, looked to science as an analog of religion. Though they sometimes disagreed on details, generally its members viewed science as a separate sphere that considered the material nature of the cosmos, just as religion explained the spiritual levels. In both their proselytizing and training of seminarians, Unificationists stressed the compatibility of their own religious perspective

with that of Western science. Especially after Reverend Moon unified the disparate movements that preceded his arrival in America, the Unification Church assumed a supportive perspective toward the scientific establishment, as demonstrated through the ICUS series of meetings. As a whole, Unificationism looked to *guide* science, to set boundaries and goals for its research, and to help scientists focus on improving both human knowledge and human living conditions.

The International Society for Krishna Consciousness took a much dimmer view of American science. Whereas Unification's founder Sun Myung Moon had accepted the Western science introduced to Korea through Japanese colonialism, ISKCON's originator Swami A.C. Bhaktivedanta rejected the bulk of the Western modern worldview that he encountered during his life in British-colonized India. The majority of the intellectual leader of the Hare Krishna movement considered Western science, like Western society more broadly, a bankrupt system. Yet the adherents of the group did not reject the concept of science, instead looking to their own Hindu tradition for a replacement to that of the West. ISKCON offered a scientific approach to understanding God, they declared, but rooted this science in the ancient Indian texts of the Vedas rather than the norms and establishments of American science. The Hare Krishnas sought to *replace* the form of science most prevalent in the United States with an alternative scientific approach.

Heaven's Gate, the final of these three new religions to emerge, took yet another approach to science. Led by two Americans who rejected their Protestant heritage as well as many of America's social mores, this movement nevertheless looked to science as a legitimate form of knowledge. They therefore borrowed from science its methodological underpinning, namely materialistic naturalism, and applied that approach

to religious topics. In their engagement with the outside world, Heaven's Gate's founders and members used naturalistic explanations of religious terms and the scientific language of biology and chemistry in order to present themselves as a scientific religion. At the heart of their message they offered an explicitly naturalistic explanation of what most would regard as a religious concept: heavenly salvation. Heaven's Gate attempted to *absorb* from science its foundation of naturalism and build upon it a religious edifice.

These three approaches—guiding, replacing, or absorbing—offer a typology of how religious movements, both new and old, responded to the tremendous growth of the presence, power, and prestige of science in late twentieth-century America. These perspectives represented three ways of answering the same questions: what was science, how did science relate to religion, and what could religion do in response to science? Americans far-removed from new religions asked similar questions and came to similar conclusions. One can therefore apply the typology developed here beyond the scope of new religious movements. Should Christian views of the origins of life on Earth *guide* how science is taught in schools? Might the alternative healing methods of Asian religions or homeopathy *replace* those of Western medicine? May a religion *absorb* scientific cosmologists' explanations for the origin and nature of the universe without rejecting their own stories of creation? Protestants, Catholics, and Jews asked the same sort of questions as did members of new religions.

Numerous religious groups adopted the position that religion ought to *guide* science and the scientific establishment. Roman Catholic engagement with ecology during the 1970s and 1980s represents just one example. Catholics had a long history of engagement with the environment before that time, of course. The thirteenth-century

Francis of Assisi spoke of stewardship of the natural world, and Pierre Teilhard de Chardin S.J. (1881-1955) envisioned humanity evolving alongside the environment toward god-realization. Following the birth of modern environmentalism in the early 1970s Catholic scholars and activists took a new interest in the science of ecology. In 1979, Pope John Paul II declared in his first encyclical, *Redemptor Hominis* (“Redeemer of Humanity”), that science must cease “exploiting” and “destroying” nature and instead serve as a “noble master and guardian.”²

The Pope represented a position shared by many in the wider Catholic community. The priest and scholar Thomas Berry C.P. (1914-) served as one of the leaders of the nascent Catholic ecology movement in the United States. Starting in the mid-1970s, Berry offered to Catholics a systematic theology of how to treat the Earth that highlighted ecological solutions. He provided a theological rationale for sustainable organic farming based on the concept of divinely created bioregions. He also urged scientists to focus research on solar technology and low-pollution technologies.³ His 1982 essay, “Ecology and the Future of Catholicism,” represented a clarion call to his Church to guide human engagement with the natural world. Catholics must respond to “industrial-technological exploitation,” he insisted, by placing the Church’s “vast authority, its energy, its educational resources, its spiritual disciplines in a creative context, one that can assist in renewing the earth as a bio-spiritual planet.” Specifically, he called for supporting research into bioregionalism.⁴ In the coming decades other Catholic environmentalist activists, such as Monsignor Charles Murphey and Sean McDonagh S.S.C. would take up Berry’s call and offer specific recommendations on how science and technology could better serve humanity and minimize damage to the Earth’s

ecology.⁵

While the Catholic Church offers an example of how a religious group might seek to guide science, the Creation Research Society, an organization of Evangelical Protestants, provides evidence of a group that attempted to *replace* a scientific paradigm with their own alternative.⁶ Specifically, the Creation Research Society (CRS) hoped to supplant conventional evolutionary biology with an alternative science predicated on Creationism. Like Catholic engagement with ecology, the CRS's history predated the latter half of the twentieth century. The infamous Scopes trial of 1925 represented one moment in that history. However, the Scopes trial represented far more an attempt to guide the teaching of science in public schools than a desire to replace conventional evolutionary science with a Creationist alternative, as Edward Larson has chronicled.⁷ Forty years later, a new series of legal rulings permitted the possibility of teaching alternative sciences—but forbidding the teaching of approaches explicitly drawn from religious sources—which led Creationist thinkers to recast their efforts. The CRS worked in light of those subsequent rulings.

As Ronald Numbers has argued, the Creation Research Society represented the vanguard of Creationist attempts to offer an alternative scientific paradigm to that of evolutionary biology. The CRS, what Numbers called “the leading creationist organization of the late twentieth century,” emerged when several Evangelical scientists in 1963 decided to found a fellowship devoted to researching and propagating scientific research in keeping with Creationism.⁸ It included among its members the coauthors of *The Genesis Flood*, a popular 1961 book that offered an alternative reading of geology in keeping with young-earth Creationism. The Creation Research Society hoped to

disseminate the same alternative science that *The Genesis Flood* had propagated two years earlier. Its members set sights on publishing in the *Saturday Evening Post* and *Time*, but eventually dedicated their association to producing a high-school textbook.⁹ For decades, the CRS's *Biology: A Search for Order in Complexity* represented the group's attempt to offer a new scientific approach to supplant evolutionary biology.¹⁰ Years later the Intelligent Design movement would look to the CRS as a forbearer in the effort to introduce a religiously-inspired replacement to evolutionary biology.

One finds fewer examples of mainstream religious groups seeking to *absorb* science. Yet during the 1980s a number of Orthodox Jewish scientists semi-independently engaged in researching ways to use the tools of science to prove the validity of the Bible's description of the creation of the universe. The impetus for such efforts derived from recent work in cosmological theory, particularly new evidence supporting the Big Bang theory. Two of these scientists, Nathan Aviezer and Gerald Schroeder, published monographs in 1990 demonstrating what they believed was strong scientific evidence for Orthodox Jewish religious belief. Schroeder's *Genesis and the Big Bang*, distributed by the trade publisher Bantam, reached a relatively large audience and launched its author's subsequent career as a public speaker on religion and science. By contrast Aviezer used a Jewish publisher for his *In the Beginning: Biblical Creation and Science*, and the book claimed a much smaller readership. Yet both Schroeder and Aviezer demonstrated that a segment within Judaism hoped to absorb the techniques and findings of science.

Physicist Nathan Aviezer structured his *In the Beginning: Biblical Creation and Science* around the first chapter of Genesis, with each chapter of his book treating a

subsequent set of verses from Genesis. Science, however, provided the hermeneutical tools for the author's investigations. "It is the thesis of this monograph that modern science has provided us with a unique opportunity to discover new and deeper insights into numerous biblical passages that otherwise seem enigmatic," wrote Aviezer.¹¹ Each chapter followed the same pattern. After quoting the Bible, Aviezer employed scientific theories to offer an explanation of both the literal and inner meaning of the verses. Big Bang theory, general relativity, the science of comets, climatology, and Darwinian evolution, among others, offered explanations for how God created the world, but also provided evidence of the deeper meaning of how humans ought to relate to each other, to the natural world, and to God. Though he never attained a large readership, Aviezer attracted the attention of the Templeton Foundation, which subsequently funded his writing and research on science and religion.¹²

Schroeder, another Orthodox physicist and author of *Genesis and the Big Bang*, focused more exclusively on using science in order to prove the Biblical account of creation as revealed in Genesis 1:1-31. In his book, Schroeder adopted a strictly scientific approach, using the Biblical text to direct the questions of inquiry but the methods and laws of science in order to answer them. He explicitly rejected any reading of Genesis that differed from the mainstream scientific understandings of biology, geology, or cosmology, a position that marked Schroeder as very different than the Protestant members of the Creation Research Society. Yet proving the truth of Genesis mattered to him, and Schroeder turned to science in order to confirm what he deeply believed, namely that Genesis accurately described a six-day creation. In order to rectify this apparent discrepancy between science and scripture, Schroeder turned to science,

particularly Einstein's general relativity. Relativity's understanding of "time dilation" (the finding that time flows at different speeds to different observers) provided the necessary proof, the author declared, that billions of years of Earth's history might count as "six 24-hour days" from the perspective of God.¹³ The tools of science, specifically general relativity, offered the best solution to explaining the meaning of Genesis, declared Schroeder.¹⁴

Roman Catholic environmentalists, the Evangelical Protestants associated with the CRS, and the Orthodox Jewish scientists all took similar approaches to science as did the three new religious movements. New religions, despite what outsiders sometimes considered strange customs, exotic costumes, and unusual concepts, shared with mainstream religions a concern with how to relate to science. All six of the groups took note of the "temple of science." Unificationists and Catholics attempted to guide its development. Hare Krishnas and Evangelical Creationists hoped to replace its paradigms. The members of Heaven's Gate and Orthodox Jewish scientists sought to absorb its approaches and turn them to the aid of religion.

New Religions in Creative Tension

The Unification Church, ISKCON, Heaven's Gate, Roman Catholic ecology, the Protestant Creation Research Society, and Jewish scientist-scholars all fit within the *guide/replace/absorb* typology. Despite their many differences, they share a commonality: none took the position that religion innately conflicted with science. These six examples all complicate the popularly-held belief that science and religion are at war, the "warfare thesis" (sometimes "conflict thesis") as historiographers call it. Though

each of these movements contested specific positions and establishments of science, they did not call for holy war against it. Creative tension, not outright conflict, characterized the three new religions on science.

During the nineteenth century the professional chemist John William Draper and Cornell historian Andrew Dickson White offered the most concise distillations of the warfare thesis. Draper's *History of the Conflict Between Religion and Science* (1874) and White's *History of the Warfare of Science with Theology in Christendom* (1896) both positioned science as involved in a continual war with religion, particularly conservative or hierarchal religion.¹⁵ The Draper-White perspective gained wide parlance among scholars and other readers, and their books enjoyed frequent re-printings for decades. Later historians stressed the warfare thesis and used it to explain late nineteenth- and early twentieth-century debates over evolution, geology, critical historical study of the Bible, and scientific approaches to social reform. Edward White's *Science and Religion in American Thought* (1952) and Norman F. Furniss's *The Fundamentalist Controversy, 1918-1931* (1963) both repeated and amplified the Draper-White warfare model.¹⁶ Historian Richard Hofstadter incorporated it as a central motif in his *Anti-Intellectualism in American Life* (1963), viewing the warfare between science as religion as part of a wider gulf between intellectual and practical culture.¹⁷

Nevertheless, recent historians have pointed to the failings of the warfare thesis. Two recent edited collections focus particularly on the history of Christianity and science, David N. Livingstone et. al.'s *Evangelicals and Science in Historical Perspective* (1999) and David C. Lindberg and Ronald L. Numbers' *When Science and Christianity Meet* (2003).¹⁸ The two-dozen essays included in these two collections

correctly note that Christians, and particularly Christians in America, have responded to science in a multitude of ways, ranging from constructive engagement to complete acceptance to strong disagreement. David Livingstone's "Situating Evangelical Responses to Evolution," included in the anthology that he also edited, represents the consensus of all the contributors to both compilations. Religious people encountered science in different historical, social, and cultural circumstances, and careful study of each of those circumstances must precede assessments of how they responded to science.¹⁹ The warfare thesis simply does not fit the evidence.

The intellectual positions of the three new religious movements add to the growing mound of evidence covering the pitfall of the warfare thesis. None of the new religions rejected science or fled from it. Even the Hare Krishna position calling for the replacement of Western science with a Vedic alternative represented not a war with science, but creative tension with it. ISKCON critiqued the American scientific establishment and the methodologies of Western science, but it also offered an alternative science embedded within an alternative religion. Individuals within the movement lived out this approach. One of the movement's leading proponents of Vedic science, Svarupa Damodara, obtained a Ph.D. in chemistry from a secular American university, and sought out fellow scientists to participate in the Bhaktivedanta Institute that he founded. ISKCON did not go to war with science, though it did wish to replace the major paradigms of Western science.

The other two new religious movements, Unificationism and Heaven's Gate, explicitly valued science, and both rejected any concept of conflict between their own religious positions and science. The Unification Church upheld science and religion as

deeply compatible. Whereas science examined the material world, religion considered the spiritual world and provided moral and ethical guidance to science. The two could not go to war, because they occupied separate territories. Heaven's Gate took an even more positive view of science, embracing the concept and absorbing its methodological foundations. While the leaders and members of the movement admitted that they sometimes disagreed with particular scientists, for example on the need for faith in Ti and Do, they believed that science and religion could not conflict because a true religion followed the same approaches as did science.

Yet if the three new religious movements demonstrated a rejection of the idea of science and religion at war, they also rebuffed the notion of capitulating to science. Although science played a central role in the theologies of the new religious movements, none of them embraced a wholly scientific approach to the world. They accepted the value of science, but contested what some scholars call "scientism," the view of science as the sole arbiter of knowledge. Mikael Stenmark's conceptualization of the various forms of scientism provides a helpful indicator of how the three new religions staked out their positions on science and religion. In his *Scientism: Science, Ethics, and Religion* (2001), Stenmark isolates several distinct forms of scientism within society: epistemic, rationalistic, ontological, axiological, existential, and comprehensive scientism.²⁰ The new religions rejected all of these, but most importantly they positioned themselves against epistemic and comprehensive scientism. These two forms of scientism within Stenmark's categorization also represent how most other scholars define the term generally: that science offers the best form of knowledge and overall worldview.

In Stenmark's words, epistemic scientism declares that "the only reality that we

can know anything about is the one science has access to.”²¹ Each of the new religions concerned themselves with epistemology, and each—along with the vast majority of old religions as well—denied epistemic scientism. The three offered different reasons for rejecting epistemic scientism, and even within each group different leaders and members offered varying positions on epistemology. The Unification Church developed a dualistic view of the cosmos that envisioned a material world knowable by science and a material world knowable by religion. While epistemic scientism might guide laboratory research, Unificationism permitted, it merited no place in the consideration of the meaning of life or the spiritual world. The members of Heaven’s Gate rejected epistemic scientism because they considered the statements of their leaders as authoritative as those of scientists, and looked to the Two as equally valid sources of information. While they valued scientific materialism and naturalism, the adherents of Heaven’s Gate claimed access to truths accessible through faith as well as empiricism. Ironically, the religion that wanted to replace Western science, ISKCON, came closest to epistemic scientism, but only because the Hare Krishnas considered their own religious approaches to be an authentic “science of God.” However ISKCON’s members joined those of Heaven’s Gate in rejecting epistemic scientism, since they too dismissed pure empiricism and looked to their guru as a source of knowledge as valid as the Vedic texts that they believed represented ancient Indian science. Each of the new religions valued science, but none held the perspective that science offered the only approach to understanding the world.

On an epistemological level the new religions could not accept epistemic scientism, but each fiercely disagreed with what Stenmark calls comprehensive scientism.

As defined by Stenmark, comprehensive scientism declares that “science alone can and will eventually solve all, or almost all, of our genuine problems.”²² To the new religious movements, such a view would represent a capitulation to science. Unification looked to science to heal the sick, promote social welfare, and (literally) build bridges across the nations. But religion, Unificationists insisted, must guide science. ISKCON envisioned its own Vedic science as a source of information on the universe and the human condition and an alternative to what they considered the moral decay of Western science. Yet like Unificationism, the Hare Krishnas looked to its religion for solutions, not the discoveries of science. Heaven’s Gate used the methodological foundations of science to recast religious concepts as in keeping with the modern scientific worldview, however it envisioned human science as fundamentally inadequate, and saw an extraterrestrial exodus as the ultimate goal. In each of these cases, just as the new religions did not seek to start a war with science, they did not want to abdicate to science either.

Taken together, the manner in which the three new religious movements responded to the power, prestige, and place of science in America—the temple of science—demonstrates the multiple ways that religious groups can incorporate creative tension with science into their broader intellectual positions. The three groups emerged from different cultural and historical circumstances, ranging from Bengal to Korea to Eastern Texas, and took differing views of science and religion. Yet they each insisted that religion could respond to science with neither warfare nor surrender.

¹ Sydney E. Ahlstrom, *A Religious History of the American People* (New Haven: Yale University Press, 1972), Catherine L. Albanese, *American Religious History: A Bibliographic Essay* (Washington, D.C.: United States Department of State Bureau of Educational and Cultural Affairs, 2002), 6.

² Pope John Paul II, *Redemptor Hominis* (Vatican City: 1979). See also Roger S. Gottlieb, *A Greener Faith: Religious Environmentalism and Our Planet's Future* (New York: Oxford University Press, 2006), 88, Sean McDonagh, S.S.C., *The Greening of the Church* (Maryknoll, New York: Orbis Books, 1990), 179-82.

³ As discussed in Anne Marie Dalton, *A Theology for the Earth: The Contributions of Thomas Berry and Bernard Lonergan* (Ottawa: University of Ottawa Press, 1999). Berry collected most of his early essays in Thomas Berry, C.P., *The Dream of Earth* (San Francisco: Sierra Club Books, 1988). See also Thomas Berry, C.P., *Management: The Managerial Ethos and the Future of Planet Earth* (Chambersburg, Penn.: American Teilhard Association for the Future of Man, 1980), Thomas Berry, C.P., *The New Story* (Chambersburg, Penn.: American Teilhard Association for the Future of Man, 1978).

⁴ Thomas Berry, C.P., "Ecology and the Future of Catholicism: A Statement of the Problem," (1982). Berry's 1982 essay is reprinted in Albert J. LaChance and John E. Carroll, eds., *Embracing Earth: Catholic Approaches to Ecology* (Maryknoll, New York: Orbis Books, 1994).

⁵ McDonagh, *The Greening of the Church*, Charles M. Murphy, *At Home on Earth: Foundations for a Catholic Ethic of the Environment* (New York: Crossroad, 1989). See also the work of the almost two-dozen contributors to LaChance and Carroll, eds., *Embracing Earth*. For a historical analysis, Gottlieb, *A Greener Faith*.

⁶ The CRS's original founders included six Lutherans, six Baptists, two Seventh-day Adventists, one Reformed Presbyterian, one Christian Reformed, and one member of the Church of the Brethren. Ronald L. Numbers, *The Creationists: From Scientific Creationism to Intelligent Design* (Cambridge: Harvard University Press, 2006), 258.

⁷ Edward J. Larson, *Summer for the Gods: The Scopes Monkey Trial and America's Continuing Debate over Science and Religion* (Cambridge: Harvard University Press, 1997).

⁸ Numbers, *The Creationists*, 239.

⁹ *Ibid.*, 249-68.

¹⁰ In addition to Numbers, see also Edward J. Larson, *Trial and Error: The American Controversy over Creation and Evolution* (New York: Oxford University Press, 1985), Dorothy Nelkin, *The Creation Controversy: Science or Scripture in the Schools* (New York: W. W. Norton & Company, 1982).

¹¹ Nathan Aviezer, *In the Beginning: Biblical Creation and Science* (Hoboken, N.J.: KTAV Publishing House, 1990), 1.

¹² Aviezer's biography as provided by his university incorrectly indicates that he won the Templeton Prize, an annual award for lifetime achievement in religion. Though that

statement is erroneous, Aviezer did receive Templeton Foundation grants to continue his work in using the tools of science to understand religion.

¹³ Gerald L. Schroeder, *Genesis and the Big Bang: The Discovery of Harmony between Modern Science and the Bible* (New York: Bantam Books, 1990), 53.

¹⁴ For another example of the Jewish attempt to absorb the tools of science into a religion, see Aryeh Carmell and Cyril Domb, eds., *Challenge: Torah Views on Science and Its Problems* (London: Association of Orthodox Jewish Scientists, 1976).

¹⁵ John William Draper, *History of the Conflict between Religion and Science* (New York: D. Appleton & Company, 1874), Andrew Dickson White, *A History of the Warfare of Science with Theology in Christendom* (New York: D. Appleton & Company, 1896).

¹⁶ Norman F. Furniss, *The Fundamentalist Controversy, 1918-1931* (Archon Books, 1963), Edward A. White, *Science and Religion in American Thought* (Stanford: Stanford University Press, 1952).

¹⁷ Richard Hofstadter, *Anti-Intellectualism in American Life* (New York: Knopf, 1963).

¹⁸ David C. Lindberg and Ronald L. Numbers, *When Science & Christianity Meet* (Chicago: University of Chicago Press, 2003), David N. Livingstone, D. G. Hart, and Mark A. Noll, eds., *Evangelicals and Science in Historical Perspective* (New York: Oxford University Press, 1999).

¹⁹ David N. Livingstone, "Situating Evangelical Responses to Evolution," in *Evangelicals and Science in Historical Perspective*, ed. David N. Livingstone, D. G. Hart, and Mark A. Noll (1999).

²⁰ See chapter one of Mikael Stenmark, *Scientism: Science, Ethics and Religion* (Aldershot, U.K.: Ashgate, 2001).

²¹ *Ibid.*, 4.

²² *Ibid.*, 15.

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